# APPENDIX

# U

INLAND RAIL

# Traffic and Transport Impact Assessment Technical Report

PART 3 OF 3

Appendices L to P

**CALVERT TO KAGARU** ENVIRONMENTAL IMPACT STATEMENT

IR_1381

ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

# APPENDIX

# U

## Traffic Impact Assessment Technical Report

## **Appendix L** Department of Transport and Main Roads Traffic Growth Rates

**CALVERT TO KAGARU** ENVIRONMENTAL IMPACT STATEMENT

IR_1381

## Location & Year / Annual Average Daily Traffic (AADT) growth rates

| Segment | Station | Lanes | Year | Annual Average Daily Traffic: Historic AADT | Projected AADT: Estimated AADT | Linear Growth Rate per year and equation used for projections (y=a*x+b): % | a | b | Equivalent Exponential Growth Rate per year: % | Final Growth Rate % |
|---|---|---|---|---|---|---|---|---|---|---|
| Cunningham Highway | 135782 | 0.8k West of Ripley Rd | 2010 | | | | | | | |
| | | | 2011 | | | | | | 1.7% | |
| | | | 2012 | 16,130 | | 2.06% | | | | |
| | | | 2013 | 16,930 | | 1.96% | | | | |
| | | | 2014 | 17,504 | | 1.90% | | | | |
| | | | 2015 | 17,504 | | 1.90% | | | | |
| | | | 2016 | 17,504 | | 1.90% | | | | |
| | | | 2018 | | 18,443 | | 332.2 | -651,936.40 | | |
| | | | 2028 | | 21,765 | | | | 1.67% | |
| | | | 2038 | | 25,087 | | | | 1.55% | |
| Cunningham Highway | 135773 | At Warrill Ck | 2010 | | | | | | | |
| | | | 2011 | | | | | | 0.9% | |
| | | | 2012 | 16,130 | | 1.05% | | | | |
| | | | 2013 | 16,930 | | 1.00% | | | | |
| | | | 2014 | 18,582 | | 0.91% | | | | |
| | | | 2015 | 16,959 | | 0.99% | | | | |
| | | | 2016 | 16,959 | | 0.99% | | | | |
| | | | 2018 | | 17,787 | | 168.7 | -322,649.80 | | |
| | | | 2028 | | 19,474 | | | | 0.91% | |
| | | | 2038 | | 21,161 | | | | 0.87% | |
| Cunningham Highway | 131819 | West of Champion Way - Willowbank | 2010 | | | | | | | |
| | | | 2011 | | | | | | -0.5% | |
| | | | 2012 | 5,493 | | -0.49% | | | | |
| | | | 2013 | 6,306 | | -0.42% | | | | |
| | | | 2014 | 5,675 | | -0.47% | | | | |
| | | | 2015 | 5,675 | | -0.47% | | | | |
| | | | 2016 | 5,675 | | -0.47% | | | | |
| | | | 2018 | | 5,658 | | -26.7 | 59,538.60 | | |
| | | | 2028 | | 5,391 | | | | -0.48% | |
| | | | 2038 | | 5,124 | | | | -0.49% | |
| Ipswich Boonah Road | 134119 | Ipswich-Boonah 1 km south of Hughes Rd | 2010 | | | | | | | |
| | | | 2011 | | | | | | 2.5% | |
| | | | 2012 | 5,927 | | 3.44% | | | | |
| | | | 2013 | 6,084 | | 3.35% | | | | |
| | | | 2014 | 6,334 | | 3.22% | | | | |
| | | | 2015 | 7,080 | | 2.88% | | | | |
| | | | 2016 | 6,449 | | 3.16% | | | | |
| | | | 2018 | | 7,191 | | 204.0 | -404,481.20 | | |
| | | | 2028 | | 9,231 | | | | 2.53% | |
| | | | 2038 | | 11,271 | | | | 2.27% | |
| Ipswich Boonah Road | 11619 | 90m sth of Washpool Rd & Schossow Rd Int | 2010 | | | | | | | |
| | | | 2011 | | | | | | 3.3% | |
| | | | 2012 | 2,675 | | 4.95% | | | | |
| | | | 2013 | 2,921 | | 4.54% | | | | |
| | | | 2014 | 2,662 | | 4.98% | | | | |
| | | | 2015 | 2,862 | | 4.63% | | | | |
| | | | 2016 | 3,367 | | 3.94% | | | | |
| | | | 2018 | | 3,427 | | 132.5 | -263,957.60 | | |
| | | | 2028 | | 4,752 | | | | 3.32% | |
| | | | 2038 | | 6,077 | | | | 2.91% | |
| Mount Lindesay Arterial Road | 135785 | 200m South of logan Mwy Ramps | 2010 | | | | | | | |
| | | | 2011 | | | | | | 2.1% | |
| | | | 2012 | 60,301 | | 2.58% | | | | |
| | | | 2013 | 59,014 | | 2.64% | | | | |
| | | | 2014 | 59,154 | | 2.63% | | | | |
| | | | 2015 | 65,065 | | 2.39% | | | | |
| | | | 2016 | 65,065 | | 2.39% | | | | |
| | | | 2018 | | 67,951 | | 1,557.9 | -3,075,890.80 | | |
| | | | 2028 | | 83,530 | | | | 2.09% | |
| | | | 2038 | | 99,109 | | | | 1.91% | |
| Mount Lindesay Highway | 136154 | 400m south of Browns Plains Road exit | 2010 | | | | | | | |
| | | | 2011 | | | | | | 2.1% | |
| | | | 2012 | | | | | | | |
| | | | 2013 | 41,864 | | 2.58% | | | | |
| | | | 2014 | 42,033 | | 2.57% | | | | |
| | | | 2015 | 44,027 | | | | | | |
| | | | 2016 | 44,794 | | 2.41% | | | | |
| | | | 2018 | | 46,954 | | 1,078.4 | -2,129,257.30 | | |
| | | | 2028 | | 57,738 | | | | 2.09% | |
| | | | 2038 | | 68,522 | | | | 1.91% | |
| Mount Lindesay Highway | 135766 | 2 350m North of Green Rd | 2010 | | | | | | | |
| | | | 2011 | | | | | | 3.3% | |
| | | | 2012 | 33,821 | | 4.92% | | | | |
| | | | 2013 | 36,256 | | 4.59% | | | | |
| | | | 2014 | 36,827 | | 4.51% | | | | |
| | | | 2015 | 40,016 | | 4.15% | | | | |
| | | | 2016 | 40,254 | | 4.13% | | | | |
| | | | 2018 | | 44,085 | | 1,662.6 | -3,311,041.60 | | |
| | | | 2028 | | 60,711 | | | | 3.25% | |
| | | | 2038 | | 77,337 | | | | 2.85% | |

## Heavy Vehicles (HV) percent projections

| Segment | Station | Year | Total (all lanes) by vehicle type: Historic AADT | Light vehicles | Heavy vehicles | Projected HV: Estimated HV | Linear Growth Rate per year and equation used for projections (y=a*x+b): % | a | b | Equivalent Exponential Growth Rate per year: % | Final Growth Rate % | Projected HV: Estimated HV | Percent of HV % | Final Percent of HV Average % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cunningham Highway | 135782 | 2010 | - | - | | | | | | | | - | | |
| | | 2011 | - | - | | | | | | | | - | | |
| | | 2012 | 16,130 | 15,066 | 1,064 | | 1.9% | | | | | 1,064 | 6.60% | 6.16% |
| | | 2013 | 16,930 | 15,986 | 944 | | 2.2% | | | | | 944 | 5.57% | |
| | | 2014 | 17,504 | 16,412 | 1,092 | | 1.9% | | | | | 1,092 | 6.24% | |
| | | 2015 | 17,504 | 16,412 | 1,092 | | | | | | | 1,092 | 6.24% | |
| | | 2016 | 17,504 | 16,412 | 1,092 | | | | | | | 1,092 | 6.24% | |
| | | 2018 | 18,443 | | | 1,141 | | 20.4 | -40,066.80 | | | 1,141 | 6.19% | |
| | | 2028 | 21,765 | | | 1,345 | | | | 1.7% | | 1,345 | 6.18% | 6.23% |
| | | 2038 | 25,087 | | | 1,549 | | | | 1.5% | | 1,586 | 6.32% | |
| Cunningham Highway | 135773 | 2010 | - | | | | | | | | | - | | |
| | | 2011 | - | | | | | | | | | - | | |
| | | 2012 | 16,130 | 15,075 | 1,055 | | -0.3% | | | | | 1,055 | 6.54% | |
| | | 2013 | 16,930 | 15,461 | 1,469 | | -0.2% | | | | | 1,469 | 8.68% | 7.51% |
| | | 2014 | 18,582 | 17,026 | 1,556 | | -0.2% | | | | | 1,556 | 8.38% | |
| | | 2015 | 16,959 | 15,776 | 1,183 | | | | | | | 1,183 | 6.98% | |
| | | 2016 | 16,959 | 15,776 | 1,183 | | | | | | | 1,183 | 6.98% | |
| | | 2018 | 17,787 | | | 1,269 | | -3.0 | 7,282.87 | | | 1,269 | 7.14% | |
| | | 2028 | 19,474 | | | 1,239 | | | | -0.2% | | 1,239 | 6.36% | 6.41% |
| | | 2038 | 21,161 | | | 1,210 | | | | -0.2% | | 1,210 | 5.72% | |
| Cunningham Highway | 131819 | 2010 | | | | | | | | | | - | | |
| | | 2011 | | | | | | | | | | - | | |
| | | 2012 | 5,493 | 5,268 | 225 | | -0.7% | | | | | 225 | 4.10% | |
| | | 2013 | 6,306 | 6,068 | 238 | | -0.6% | | | | | 238 | 3.77% | 3.95% |
| | | 2014 | 5,675 | 5,450 | 225 | | -0.7% | | | | | 225 | 3.96% | |
| | | 2015 | 5,675 | 5,450 | 225 | | | | | | | 225 | 3.96% | |
| | | 2016 | 5,675 | 5,450 | 225 | | | | | | | 225 | 3.96% | |
| | | 2018 | 5,658 | | | 218 | | -1.5 | 3,184.44 | | | 218 | 3.85% | |
| | | 2028 | 5,391 | | | 203 | | | | -0.7% | | 203 | 3.77% | 3.77% |
| | | 2038 | 5,124 | | | 189 | | | | -0.7% | | 190 | 3.70% | |
| Ipswich Boonah Road | 134119 | 2010 | - | | | | | | | | | | | |
| | | 2011 | - | | | | | | | | | | | |
| | | 2012 | 5,927 | 5,236 | 691 | | -3.2% | | | | | 691 | 11.66% | |
| | | 2013 | 6,084 | 5,539 | 545 | | -4.0% | | | | | 545 | 8.95% | 9.35% |
| | | 2014 | 6,334 | 5,727 | 607 | | -3.6% | | | | | 607 | 9.58% | |
| | | 2015 | 7,080 | 6,558 | 522 | | | | | | | 522 | 7.37% | |
| | | 2016 | 6,449 | 5,857 | 592 | | | | | | | 592 | 9.18% | |
| | | 2018 | 7,191 | | | 513 | | -22.0 | 44,847.96 | | | 513 | 7.13% | |
| | | 2028 | 9,231 | | | 293 | | | | -5.4% | | 293 | 3.17% | 3.93% |
| | | 2038 | 11,271 | | | 73 | | | | -9.3% | | 167 | 1.48% | |
| Ipswich Boonah Road | 11619 | 2010 | - | | | | | | | | | - | | |
| | | 2011 | - | | | | | | | | | - | | |
| | | 2012 | 2,675 | 2,402 | 273 | | 4.4% | | | | | 273 | 10.19% | |
| | | 2013 | 2,921 | 2,685 | 236 | | 5.1% | | | | | 236 | 8.09% | 8.77% |
| | | 2014 | 2,662 | 2,465 | 197 | | 6.1% | | | | | 197 | 7.39% | |
| | | 2015 | 2,862 | 2,625 | 237 | | | | | | | 237 | 8.29% | |
| | | 2016 | 3,367 | 3,034 | 333 | | | | | | | 333 | 9.88% | |
| | | 2018 | 3,427 | | | 295 | | 12.1 | -24,082.68 | | | 295 | 8.60% | |
| | | 2028 | 4,752 | | | 416 | | | | 3.5% | | 416 | 8.74% | 8.99% |
| | | 2038 | 6,077 | | | 536 | | | | 3.0% | | 586 | 9.64% | |
| Mount Lindesay Arterial Road | 135785 | 2010 | - | - | | | | | | | | - | | |
| | | 2011 | - | - | | | | | | | | - | | |
| | | 2012 | 60,301 | 53,660 | 6,641 | | 0.3% | | | | | 6,641 | 11.01% | |
| | | 2013 | 59,014 | 52,515 | 6,499 | | 0.3% | | | | | 6,499 | 11.01% | 10.70% |
| | | 2014 | 59,154 | 52,639 | 6,515 | | 0.3% | | | | | 6,515 | 11.01% | |
| | | 2015 | 65,065 | 58,405 | 6,660 | | 0.3% | | | | | 6,660 | 10.24% | |
| | | 2016 | 65,065 | 58,405 | 6,660 | | 0.3% | | | | | 6,660 | 10.24% | |
| | | 2018 | 67,951 | | | 6,670 | | 19.8 | -33,185.54 | | | 6,670 | 9.82% | |
| | | 2028 | 83,530 | | | 6,867 | | | | 0.3% | | 6,867 | 8.22% | 8.39% |
| | | 2038 | 99,109 | | | 7,065 | | | | 0.3% | | 7,071 | 7.13% | |
| Mount Lindesay Highway | 136154 | 2010 | - | | | | | | | | | - | | |
| | | 2011 | - | | | | | | | | | | | |
| | | 2012 | - | | | | | | | | | | | |
| | | 2013 | 41,864 | 36,565 | 5,299 | | 0.4% | | | | | 5,299 | 12.66% | 11.51% |
| | | 2014 | 42,033 | 37,580 | 4,453 | | 0.5% | | | | | 4,453 | 10.59% | |
| | | 2015 | 44,027 | 39,124 | 4,903 | | | | | | | 4,903 | 11.14% | |
| | | 2016 | 44,794 | 39,567 | 5,227 | | 0.4% | | | | | 5,227 | 11.67% | |
| | | 2018 | 46,954 | 46,954 | | 5,046 | | 23.3 | -41,952.88 | | | 5,046 | 10.75% | |
| | | 2028 | 57,738 | | | 5,279 | | | | 0.5% | | 5,279 | 9.14% | 9.32% |
| | | 2038 | 68,522 | | | 5,512 | | | | 0.4% | | 5,523 | 8.06% | |
| Mount Lindesay Highway | 135766 2 | 2010 | - | | | | | | | | | - | | |
| | | 2011 | - | | | | | | | | | - | | |
| | | 2012 | 33,821 | 29,244 | 4,577 | | -0.5% | | | | | 4,577 | 13.53% | |
| | | 2013 | 36,256 | 32,328 | 3,928 | | -0.6% | | | | | 3,928 | 10.83% | 11.31% |
| | | 2014 | 36,827 | 32,735 | 4,092 | | -0.5% | | | | | 4,092 | 11.11% | |
| | | 2015 | 40,016 | 35,945 | 4,071 | | -0.5% | | | | | 4,071 | 10.17% | |
| | | 2016 | 40,254 | 35,859 | 4,395 | | -0.5% | | | | | 4,395 | 10.92% | |
| | | 2018 | 44,085 | | | 4,070 | | -22.1 | 48,748.80 | | | 4,070 | 9.23% | |
| | | 2028 | 60,711 | | | 3,849 | | | | -0.6% | | 3,849 | 6.34% | 6.76% |
| | | 2038 | 77,337 | | | 3,627 | | | | -0.6% | | 3,640 | 4.71% | |

| Location & Year | | | | Annual Average Daily Traffic (AADT) growth rates | | | | | | | | | Heavy Vehicles (HV) percent projections | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Segment | Station | Lanes | Year | Annual Average Daily Traffic | Projected AADT | Linear Growth Rate per year and equation used for projections (y=a*x+b) | | | Equivalent Exponential Growth Rate per year | | Final Growth Rate | Total (all lanes) by vehicle type | | | Projected HV | Linear Growth Rate per year and equation used for projections (y=a*x+b) | | | Equivalent Exponential Growth Rate per year | | Final Growth Rate | Projected HV | Percent of HV | Final Percent of HV |
| | | | | Historic AADT | Estimated AADT | % | a | b | % | | % | Historic AADT | Light vehicles | Heavy vehicles | Estimated HV | % | a | b | % | | % | Estimated HV | % | Average % |
| Mount Lindesay Highway | 135767 | 600m North of Stony Camp Rd | 2010 | | | | | | | Annual Average Daily Traffic; Projected AADT; Estimated AADT; Linear (Annual Average Daily Traffic); y = 1,552.60x - 3,101,610.80; R² = 0.96 | | - | | | | | | | | Heavy vehicles; Projected HV; Estimated HV; Linear (Heavy vehicles); y = 20.42x - 40,066.80; R² = 0.25 | | | | | |
| | | | 2011 | | | | | | 4.1% | | | - | | | | | | | | | | | | | |
| | | | 2012 | 22,088 | | 7.03% | | | | | | 22,088 | 19,388 | 2,700 | | -4.0% | | | | y = -107.66x + 219,435.82; R² = 0.25 | | | 2,700 | 12.22% | |
| | | | 2013 | 24,130 | | 6.43% | | | | | | 24,130 | 21,012 | 3,118 | | -3.5% | | | | | | | 3,118 | 12.92% | 11.26% |
| | | | 2014 | 24,757 | | 6.27% | | | | | | 24,757 | 21,563 | 3,194 | | -3.4% | | | | | | | 3,194 | 12.90% | |
| | | | 2015 | 27,474 | | 5.65% | | | | | | 27,474 | 24,773 | 2,701 | | -4.0% | | | | | | | 2,701 | 9.83% | |
| | | | 2016 | 28,179 | | 5.51% | | | | | | 28,179 | 25,809 | 2,370 | | -4.5% | | | | | | | 2,370 | 8.41% | |
| | | | 2018 | | 31,536 | | 1,552.6 | -3,101,610.80 | | | 4.08% | 31,536 | | | 2,178 | | -107.7 | 219,435.82 | | | -6.6% | 2,178 | 6.91% | |
| | | | 2028 | | 47,062 | | | | 4.08% | | | 47,062 | | | 1,101 | | | | -6.6% | | | 1,101 | 2.34% | 3.38% |
| | | | 2038 | | 62,588 | | | | 3.49% | | | 62,588 | | | 25 | | | | -20.1% | | | 557 | 0.89% | |
| Mount Lindesay Highway | 10098 | 700m south of Stoney Camp Rd, Munruben | 2010 | | | | | | | y = 1,156.10x - 2,308,237.40; R² = 0.97 | | - | | | | | | | | y = 35.51x - 69,878.15; R² = 0.07 | | - | | | |
| | | | 2011 | | | | | | 3.9% | | | - | | | | | | | | | | - | | | |
| | | | 2012 | 17,787 | | 6.50% | | | | | | 17,787 | 16,340 | 1,447 | | 2.5% | | | | | | 1,447 | 8.14% | | |
| | | | 2013 | 18,969 | | 6.09% | | | | | | 18,969 | 17,312 | 1,657 | | 2.1% | | | | | | 1,657 | 8.73% | 7.80% | |
| | | | 2014 | 20,030 | | 5.77% | | | | | | 20,030 | 18,409 | 1,621 | | 2.2% | | | | | | 1,621 | 8.09% | | |
| | | | 2015 | 21,804 | | 5.30% | | | | | | 21,804 | 20,538 | 1,266 | | 2.8% | | | | | | 1,266 | 5.81% | | |
| | | | 2016 | 22,150 | | 5.22% | | | | | | 22,150 | 20,330 | 1,820 | | 2.0% | | | | | | 1,820 | 8.22% | | |
| | | | 2018 | | 24,772 | | 1,156.1 | -2,308,237.40 | | | 3.90% | 24,772 | | | 1,781 | | 35.5 | -69,878.15 | | | 1.8% | 1,781 | 7.19% | | |
| | | | 2028 | | 36,333 | | | | 3.90% | | | 36,333 | | | 2,136 | | | | 1.8% | | | 2,136 | 5.88% | 6.14% | |
| | | | 2038 | | 47,894 | | | | 3.35% | | | 47,894 | | | 2,491 | | | | 1.7% | | | 2,562 | 5.35% | | |
| Mount Lindesay Highway | 10029 | 460m south of Camp Cable Rd, Jimboomba | 2010 | | | | | | | y = 1,376.10x - 2,749,199.40; R² = 0.91 | | - | | | | | | | | y = 59.31x - 116,952.00; R² = 0.05 | | - | | | |
| | | | 2011 | | | | | | 4.1% | | | - | | | | | | | | | | - | | | |
| | | | 2012 | 20,135 | | 6.83% | | | | | | 20,135 | 17,758 | 2,377 | | 2.5% | | | | | | 2,377 | 11.81% | | |
| | | | 2013 | 20,629 | | 6.67% | | | | | | 20,629 | 18,446 | 2,183 | | 2.7% | | | | | | 2,183 | 10.58% | 10.72% | |
| | | | 2014 | 21,217 | | 6.49% | | | | | | 21,217 | 18,568 | 2,649 | | 2.2% | | | | | | 2,649 | 12.48% | | |
| | | | 2015 | 24,038 | | 5.72% | | | | | | 24,038 | 22,267 | 1,771 | | 3.3% | | | | | | 1,771 | 7.37% | | |
| | | | 2016 | 25,311 | | 5.44% | | | | | | 25,311 | 22,431 | 2,880 | | 2.1% | | | | | | 2,880 | 11.38% | | |
| | | | 2018 | | 27,770 | | 1,376.1 | -2,749,199.40 | | | 4.11% | 27,770 | | | 2,736 | | 59.3 | -116,952.00 | | | 2.0% | 2,736 | 9.85% | | |
| | | | 2028 | | 41,531 | | | | 4.11% | | | 41,531 | | | 3,329 | | | | 2.0% | | | 3,329 | 8.01% | 8.40% | |
| | | | 2038 | | 55,292 | | | | 3.50% | | | 55,292 | | | 3,922 | | | | 1.8% | | | 4,050 | 7.33% | | |
| Mount Lindesay Highway | 11753 | 450m north of Cryna Rd | 2010 | | | | | | | y = 209.00x - 415,654.00; R² = 0.85 | | - | | | | | | | | y = -19.48x + 39,574.54; R² = 0.31 | | - | | | |
| | | | 2011 | | | | | | 3.0% | | | - | | | | | | | | | | - | | | |
| | | | 2012 | 4,774 | | 4.38% | | | | | | 4,774 | 4,399 | 375 | | -5.2% | | | | | | 375 | 7.86% | | |
| | | | 2013 | 5,219 | | 4.00% | | | | | | 5,219 | 4,743 | 476 | | -4.1% | | | | | | 476 | 9.12% | 7.28% | |
| | | | 2014 | 5,294 | | 3.95% | | | | | | 5,294 | 4,922 | 372 | | -5.2% | | | | | | 372 | 7.03% | | |
| | | | 2015 | 5,289 | | 3.95% | | | | | | 5,289 | 4,953 | 336 | | -5.8% | | | | | | 336 | 6.36% | | |
| | | | 2016 | 5,784 | | 3.61% | | | | | | 5,784 | 5,436 | 348 | | -5.6% | | | | | | 348 | 6.01% | | |
| | | | 2018 | | 6,108 | | 209.0 | -415,654.00 | | | 2.99% | 6,108 | | | 264 | | -19.5 | 39,574.54 | | | -12.5% | 264 | 4.32% | | |
| | | | 2028 | | 8,198 | | | | 2.99% | | | 8,198 | | | 69 | | | | -12.5% | | | 69 | 0.84% | 1.78% | |
| | | | 2038 | | 10,288 | | | | 2.64% | | | 10,288 | | | -126 | | | | | | | 18 | 0.18% | | |
| Mount Lindesay Highway | 10030 | Tamrookum Hall | 2010 | | | | | | | y = 52.90x - 104,686.80; R² = 0.89 | | - | | | | | | | | y = -6.42x + 13,045.01; R² = 0.45 | | - | | | |
| | | | 2011 | | | | | | 2.3% | | | - | | | | | | | | | | - | | | |
| | | | 2012 | 1,770 | | 2.99% | | | | | | 1,770 | 1,643 | 127 | | -15.3% | | | | | | 127 | 7.19% | | |
| | | | 2013 | 1,803 | | 2.93% | | | | | | 1,803 | 1,678 | 125 | | -15.6% | | | | | | 125 | 6.94% | 6.56% | |
| | | | 2014 | 1,803 | | 2.93% | | | | | | 1,803 | 1,672 | 131 | | -14.9% | | | | | | 131 | 7.25% | | |
| | | | 2015 | 1,914 | | 2.76% | | | | | | 1,914 | 1,787 | 127 | | -15.3% | | | | | | 127 | 6.64% | | |
| | | | 2016 | 1,979 | | 2.67% | | | | | | 1,979 | 1,885 | 94 | | -20.7% | | | | | | 94 | 4.76% | | |
| | | | 2018 | | 2,065 | | 52.9 | -104,686.80 | | | 2.31% | 2,065 | | | 264 | | -19.5 | 39,574.54 | | | -12.5% | 264 | 12.78% | | |
| | | | 2028 | | 2,594 | | | | 2.31% | | | 2,594 | | | 69 | | | | -12.5% | | | 69 | 2.66% | 5.34% | |
| | | | 2038 | | 3,123 | | | | 2.09% | | | 3,123 | | | -126 | | | | | | | 18 | 0.58% | | |
| Mount Lindesay Highway | 11426 | 2.08km south of Boonah-Rathdowney Rd | 2010 | | | | | | | y = 22.10x - 43,794.40; R² = 0.89 | | - | | | | | | | | y = -0.42x + 896.19; R² = 0.01 | | | | | |
| | | | 2011 | | | | | | 2.5% | | | - | | | | | | | | | | - | | | |
| | | | 2012 | 676 | | 3.27% | | | | | | 676 | 630 | 46 | | -0.9% | | | | | | 46 | 6.82% | 6.40% | |
| | | | 2013 | 694 | | 3.18% | | | | | | 694 | 641 | 53 | | -0.8% | | | | | | 53 | 7.70% | | |
| | | | 2014 | 712 | | 3.10% | | | | | | 712 | 676 | 36 | | -1.2% | | | | | | 36 | 5.03% | | |
| | | | 2015 | 719 | | 3.07% | | | | | | 719 | 674 | 45 | | -0.9% | | | | | | 45 | 6.24% | | |
| | | | 2016 | 774 | | 2.86% | | | | | | 774 | 726 | 48 | | -0.9% | | | | | | 48 | 6.24% | | |
| | | | 2018 | | 803 | | 22.1 | -43,794.40 | | | 2.46% | 803 | | | 49 | | -0.4 | 896.19 | | | -16.3% | 49 | 6.05% | | |
| | | | 2028 | | 1,024 | | | | 2.46% | | | 1,024 | | | 44 | | | | -16.3% | | | 8 | 0.80% | 2.32% | |
| | | | 2038 | | 1,245 | | | | 2.22% | | | 1,245 | | | 40 | | | | -0.9% | | | 1 | 0.11% | | |
| Ipswich Rosewood Road | 135535 | Ipswich/ Rosewood Rd Wst of Rail Bridge | 2010 | | | | | | | y = -5.40x + 13,512.20; R² = 0.00 | | - | | | | | | | | y = 22.35x - 44,636.56; R² = 0.32 | | - | | | |
| | | | 2011 | | | | | | -0.2% | | | - | | | | | | | | | | - | | | |
| | | | 2012 | 2,553 | | -0.21% | | | | | | 2,553 | 2,336 | 217 | | 10.3% | | | | | | 217 | 8.50% | | |
| | | | 2013 | 2,595 | | -0.21% | | | | | | 2,595 | 2,215 | 380 | | 5.9% | | | | | | 380 | 14.64% | 12.30% | |
| | | | 2014 | 2,937 | | -0.18% | | | | | | 2,937 | 2,608 | 329 | | 6.8% | | | | | | 329 | 11.20% | | |
| | | | 2015 | 2,549 | | -0.21% | | | | | | 2,549 | 2,203 | 346 | | 6.5% | | | | | | 346 | 13.57% | | |
| | | | 2016 | 2,549 | | -0.21% | | | | | | 2,549 | 2,203 | 346 | | 6.5% | | | | | | 346 | 13.57% | | |
| | | | 2018 | | 2,615 | | -5.4 | 13,512.20 | | | -0.21% | 2,615 | | | 466 | | 22.4 | -44,636.56 | | | 10.1% | 466 | 17.81% | | |
| | | | 2028 | | 2,561 | | | | -0.21% | | | 2,561 | | | 689 | | | | 10.1% | | | 1,216 | 47.50% | 64.01% | |
| | | | 2038 | | 2,507 | | | | -0.21% | | | 2,507 | | | 913 | | | | 3.4% | | | 3,177 | 126.72% | | |
| Ipswich Rosewood Road | 135533 | Ipswich/ Rosewood Rd Nth of Cunningham Hwy | 2010 | | | | | | | y = -140.00x + 288,117.00; R² = 0.27 | | - | | | | | | | | y = -27.59x + 56,192.87; R² = 0.43 | | - | | | |
| | | | 2011 | | | | | | -2.8% | | | - | | | | | | | | | | - | | | |
| | | | 2012 | 6,192 | | -2.26% | | | | | | 6,192 | 5,462 | 730 | | -3.8% | | | | | | 730 | 11.79% | | |
| | | | 2013 | 6,299 | | -2.22% | | | | | | 6,299 | 5,615 | 684 | | -4.0% | | | | | | 684 | 10.86% | 11.14% | |
| | | | 2014 | 6,772 | | -2.07% | | | | | | 6,772 | 5,998 | 774 | | -3.6% | | | | | | 774 | 11.43% | | |
| | | | 2015 | 5,761 | | -2.43% | | | | | | 5,761 | 5,138 | 623 | | -4.4% | | | | | | 623 | 10.81% | | |
| | | | 2016 | 5,761 | | -2.43% | | | | | | 5,761 | 5,138 | 623 | | -4.4% | | | | | | 623 | 10.81% | | |
| | | | 2018 | | 5,597 | | -140.0 | 288,117.00 | | | -2.84% | 5,597 | | | 516 | | -27.6 | 56,192.87 | | | -0.9% | 516 | 9.22% | | |
| | | | 2028 | | 4,197 | | | | -2.84% | | | 4,197 | | | 240 | | | | -0.9% | | | 470 | 11.20% | 11.91% | |
| | | | 2038 | | 2,797 | | | | -3.83% | | | 2,797 | | | -36 | | | | | | | 428 | 15.31% | | |
| Average | | | | | | | | | | | 2.01% | | | | | | | | | | | | | | |

# APPENDIX U

# Traffic Impact Assessment Technical Report

## Appendix M Roads and Maritime Services Traffic Growth

**CALVERT TO KAGARU** ENVIRONMENTAL IMPACT STATEMENT

IR_1381

| Location & Year | | | Annual Average Daily Traffic growth rates | | | | | | | | Heavy Vehicles (HV) percent projections | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Segment | Station Lanes | Year | Annual Average Daily Traffic | Projected AADT | Linear Growth Rate per year and equation used for projections (y=a*x+b) | | | Equivalent Exponential Growth Rate per year | | Final Growth Rate | Total (all lanes) by vehicle type | | | Projected HV | Linear Growth Rate per year and equation used for projections (y=a*x+b) | | | Equivalent Exponential Growth Rate per year | | Final Growth Rate | Projected HV | Percent of HV | Final Percent of HV |
| | | | Historic AADT | Estimated AADT | % | a | b | % | | % | Historic AADT | Light vehicles | Heavy vehicles | Estimated HV | % | a | b | % | | % | Estimated HV | % | Average % |
| Summerland Way | T0261 | 2011 | | | | | | | | 4.61% | - | - | | | | | | | | 5.8% | - | | |
| | | 2012 | | | | | | | | | - | - | | | | | | | | | - | | |
| | | 2013 | 2,800 | | 6.35% | | | | | | 2,800 | 2,341 | 459 | | | | | | | | 459 | | 18.08% |
| | | 2014 | 1,437 | | | | | | | | 1,437 | 1,203 | 234 | | | | | | | | 234 | | |
| | Between Bruxner Highway and Red Lane | 2015 | 2,843 | | 6.26% | | | | | | 2,843 | 2,329 | 514 | | 8.6% | | | | | | 514 | 18.08% | |
| | | 2016 | 2,900 | | 6.13% | | | | | | 2,900 | 2,376 | 524 | | 8.4% | | | | | | 524 | 18.08% | |
| | | 2017 | 2,958 | | 6.01% | | | | | | 2,958 | 2,423 | 535 | | 8.3% | | | | | | 535 | 18.08% | |
| | | 2018 | | 3,121 | | 177.9 | -355,795.20 | | | | 3,121 | | | 586 | | 44.2 | -88,571.75 | | | | 586 | 18.77% | |
| | | 2028 | | 4,900 | | | | 4.61% | | | 4,900 | | | 1,028 | | | | 5.8% | | | 1,028 | 20.97% | 22.24% |
| | | 2038 | | 6,678 | | | | 3.88% | | | 6,678 | | | 1,469 | | | | 4.7% | | | 1,803 | 26.99% | |
| Pacific Motorway | 6115 | 2010 | | | | | | | | 1.76% | - | - | | | | | | | | 1.8% | - | - | #DIV/0! |
| | | 2011 | | | | | | | | | - | - | - | | #DIV/0! | | | | | | - | #DIV/0! | |
| | | 2012 | | | | | | | | | - | - | - | | #DIV/0! | | | | | | - | #DIV/0! | #DIV/0! |
| | | 2013 | | | | | | | | | - | - | - | | #DIV/0! | | | | | | - | #DIV/0! | |
| | | 2014 | | | | | | | | | - | - | - | | | | | | | | - | | |
| | Between QLD/ NSW border and Gwydir Highway | 2015 | 7,497 | | 2.02% | | | | | | 7,497 | 4,781 | 2,716 | | | | | | | | 2,716 | 36.23% | |
| | | 2016 | 7,647 | | 1.98% | | | | | | 7,647 | 4,877 | 2,770 | | | | | | | | | | |
| | | 2017 | 7,800 | | 1.94% | | | | | | 7,800 | 4,974 | 2,826 | | | | | | | | | | |
| | | 2018 | | 7,951 | | 151.4 | -297,653.89 | | | | 7,951 | | | 2,880 | | 54.9 | -107,833.53 | | | | 2,880 | 36.23% | |
| | | 2028 | | 9,465 | | | | 1.76% | | | 9,465 | | | 3,429 | | | | 1.8% | | | 3,429 | 36.23% | 36.55% |
| | | 2038 | | 10,980 | | | | 1.63% | | | 10,980 | | | 3,978 | | | | 1.6% | | | 4,082 | 37.18% | |
| Summerland Way | 04341 | 2011 | 3,081 | | 2.10% | | | | | | | | 338 | | | | | | | | 338 | | |
| | | 2012 | 3,143 | | 2.06% | | | | | | | | 345 | | | | | | | | 345 | | |
| | | 2013 | 3,205 | | 2.02% | | | | | | 3,205 | 2,854 | 352 | | | | | | | | 352 | | |
| | | 2014 | 3,270 | | 1.98% | | | | | | 3,270 | 2,911 | 359 | | | | | | | | 359 | | 10.97% |
| | Between NSW/QLD Border and Bruxner Way | 2015 | 3,335 | | 1.94% | | | | | | 3,335 | 2,969 | 366 | | 1.9% | | | | | | 366 | 10.97% | |
| | | 2016 | 3,402 | | 1.90% | | | | | | 3,402 | 3,028 | 373 | | 1.9% | | | | | | 373 | 10.97% | |
| | | 2017 | 3,470 | | 1.87% | | | | | | 3,470 | 3,089 | 381 | | 1.9% | | | | | | 381 | 10.97% | |
| | | 2018 | | 3,531 | | 64.8 | -127,186.59 | | | | 3,531 | | | 387 | | 7.1 | -13,952.96 | | | | 387 | 10.97% | |
| | | 2028 | | 4,179 | | | | 1.70% | | | 4,179 | | | 458 | | | | 1.7% | | | 458 | 10.97% | 11.06% |
| | | 2038 | | 4,827 | | | | 1.57% | | | 4,827 | | | 530 | | | | 1.6% | | | 543 | 11.24% | |
| Summerland Way | 04331 | 2011 | 5,903 | | | | | | | 1.70% | 5,903 | | 502 | | | | | | | 5.3% | 502 | | |
| | | 2012 | 6,021 | | | | | | | | 6,021 | | 512 | | | | | | | | 512 | | |
| | | 2013 | 6,141 | | | | | | | | 6,141 | | 522 | | | | | | | | 522 | | |
| | | 2014 | 6,264 | | | | | | | | 6,264 | | 533 | | | | | | | | 533 | | 8.50% |
| | Between Trenayr Road and Turf Street | 2015 | 6,390 | | 1.94% | | | | | | 6,390 | 5,846 | 543 | | 1.9% | | | | | | 543 | 8.50% | |
| | | 2016 | 6,517 | | 1.90% | | | | | | 6,517 | 5,963 | 554 | | 1.9% | | | | | | 554 | 8.50% | |
| | | 2017 | 6,648 | | 1.87% | | | | | | 6,648 | 6,082 | 565 | | 1.9% | | | | | | 565 | 8.50% | |
| | | 2018 | | 6,766 | | 124.1 | -243,681.42 | | | | 6,766 | | | 155 | | 10.6 | -21,143.37 | | | | 155 | 2.29% | |
| | | 2028 | | 8,007 | | | | 1.70% | | | 8,007 | | | 261 | | | | 5.3% | | | 261 | 3.25% | 3.43% |
| | | 2038 | | 9,248 | | | | 1.57% | | | 9,248 | | | 366 | | | | 4.4% | | | 438 | 4.74% | |
| Average | | | | | | | | | | 2.4% | | | | | | | | | | | | | |

# APPENDIX U

# Traffic Impact Assessment Technical Report

## Appendix N Detailed Road Link Analyses

**CALVERT TO KAGARU** ENVIRONMENTAL IMPACT STATEMENT

IR_1381

Section Between Cunningham Highway and Paynes Road
Route Champions Way
Link Locality:

Champions Way - Between Cunningham Highway and Paynes Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 177 | 180 | 184 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 |
| Total vehicles (veh/h) | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 161 | 164 | 167 | 170 | 174 | 177 | 181 | 184 | 188 | 192 | 196 | 200 | 204 | 208 | 212 | 216 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 861 | 878 | 896 | 914 | 932 | 951 | 970 | 989 | 1009 | 1029 | 1050 | 1071 | 1092 | 1114 | 1136 | 1159 | 1182 | 1206 | 1230 | 1255 | 1280 | 1305 | 1331 | 1358 | 1385 | 1413 | 1441 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 161 | 164 | 167 | 170 | 174 | 177 | 181 | 184 | 188 | 192 | 196 | 200 | 204 | 208 | 212 | 216 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 160 | 163 | 166 | 169 | 173 | 176 | 180 | 183 | 187 | 191 | 194 | 198 | 202 | 206 | 210 | 215 | 219 | 223 | 228 | 232 |
| LoS Result | A | A | A | A | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 177 | 180 | 184 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 |
| Total vehicles (veh/h) | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 161 | 164 | 167 | 170 | 174 | 177 | 181 | 184 | 188 | 192 | 196 | 200 | 204 | 208 | 212 | 216 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 861 | 878 | 896 | 914 | 932 | 951 | 970 | 989 | 1009 | 1029 | 1050 | 1071 | 1092 | 1114 | 1136 | 1159 | 1182 | 1206 | 1230 | 1255 | 1280 | 1305 | 1331 | 1358 | 1385 | 1413 | 1441 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 160 | 163 | 166 | 169 | 173 | 176 | 180 | 183 | 187 | 191 | 194 | 198 | 202 | 206 | 210 | 215 | 219 | 223 | 228 | 232 |
| Development Traffic (veh/h) | | | 0 | 24 | 25 | 25 | 26 | 27 | 24 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 139 | 142 | 144 | 183 | 188 | 191 | 196 | 200 | 199 | 166 | 169 | 173 | 176 | 180 | 183 | 187 | 191 | 194 | 198 | 202 | 206 | 210 | 215 | 219 | 223 | 228 | 232 |
| LoS Result | A | A | A | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 |

Section Between Cunningham Highway and Paynes Road
Route Champions Way
Link Locality:

Champions Way - Between Cunningham Highway and Paynes Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 177 | 180 | 184 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 |
| Total vehicles (veh/h) | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 161 | 164 | 167 | 170 | 174 | 177 | 181 | 184 | 188 | 192 | 196 | 200 | 204 | 208 | 212 | 216 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 861 | 878 | 896 | 914 | 932 | 951 | 970 | 989 | 1009 | 1029 | 1050 | 1071 | 1092 | 1114 | 1136 | 1159 | 1182 | 1206 | 1230 | 1255 | 1280 | 1305 | 1331 | 1358 | 1385 | 1413 | 1441 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 161 | 164 | 167 | 170 | 174 | 177 | 181 | 184 | 188 | 192 | 196 | 200 | 204 | 208 | 212 | 216 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 160 | 163 | 166 | 169 | 173 | 176 | 180 | 183 | 187 | 191 | 194 | 198 | 202 | 206 | 210 | 215 | 219 | 223 | 228 | 232 |
| LoS Result | A | A | A | A | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 177 | 180 | 184 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 |
| Total vehicles (veh/h) | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 161 | 164 | 167 | 170 | 174 | 177 | 181 | 184 | 188 | 192 | 196 | 200 | 204 | 208 | 212 | 216 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 861 | 878 | 896 | 914 | 932 | 951 | 970 | 989 | 1009 | 1029 | 1050 | 1071 | 1092 | 1114 | 1136 | 1159 | 1182 | 1206 | 1230 | 1255 | 1280 | 1305 | 1331 | 1358 | 1385 | 1413 | 1441 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 160 | 163 | 166 | 169 | 173 | 176 | 180 | 183 | 187 | 191 | 194 | 198 | 202 | 206 | 210 | 215 | 219 | 223 | 228 | 232 |
| Development Traffic (veh/h) | | | 0 | 24 | 25 | 25 | 26 | 27 | 24 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 139 | 142 | 144 | 183 | 188 | 191 | 196 | 200 | 199 | 166 | 169 | 173 | 176 | 180 | 183 | 187 | 191 | 194 | 198 | 202 | 206 | 210 | 215 | 219 | 223 | 228 | 232 |
| LoS Result | A | A | A | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 |

Section Full Extent
Route Coveney Road
Link Locality:

Coveney Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total vehicles (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total vehicles (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| Average Annual Daily Traffic (AADT) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Development Traffic (veh/h) | | | | 12 | 13 | 13 | 14 | 15 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 1 | 1 | 1 | 20 | 21 | 21 | 23 | 24 | 20 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section Full Extent
Route Coveney Road
Link Locality:

Coveney Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total vehicles (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total vehicles (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Average Annual Daily Traffic (AADT) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Development Traffic (veh/h) | | | 0 | 12 | 13 | 13 | 14 | 15 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 1 | 1 | 1 | 19 | 20 | 20 | 23 | 24 | 20 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section Between Coopers Road and Rosewood Warrill View Rd
Route Ebenezer Road
Link Locality:

Ebenezer Road - Between Coopers Road and Rosewood Warrill View Rd

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 547 | 558 | 569 | 581 | 592 | 604 | 616 | 629 | 641 | 654 | 667 | 680 | 694 | 708 | 722 | 736 | 751 | 766 | 781 | 797 | 813 | 829 | 846 | 863 | 880 | 898 | 916 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 88 | 90 | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 547 | 558 | 569 | 581 | 592 | 604 | 616 | 629 | 641 | 654 | 667 | 680 | 694 | 708 | 722 | 736 | 751 | 766 | 781 | 797 | 813 | 829 | 846 | 863 | 880 | 898 | 916 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 88 | 90 | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 |
| Development Traffic (veh/h) | | | 0 | 8 | 9 | 9 | 9 | 10 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 88 | 90 | 92 | 106 | 109 | 111 | 112 | 116 | 115 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |

Section Between Coopers Road and Rosewood Warrill View Rd
Route Ebenezer Road
Link Locality:

Ebenezer Road - Between Coopers Road and Rosewood Warrill View Rd

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 547 | 558 | 569 | 581 | 592 | 604 | 616 | 629 | 641 | 654 | 667 | 680 | 694 | 708 | 722 | 736 | 751 | 766 | 781 | 797 | 813 | 829 | 846 | 863 | 880 | 898 | 916 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 88 | 90 | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 547 | 558 | 569 | 581 | 592 | 604 | 616 | 629 | 641 | 654 | 667 | 680 | 694 | 708 | 722 | 736 | 751 | 766 | 781 | 797 | 813 | 829 | 846 | 863 | 880 | 898 | 916 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 88 | 90 | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 |
| Development Traffic (veh/h) | | | 0 | 8 | 9 | 9 | 9 | 10 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 88 | 90 | 92 | 106 | 109 | 111 | 112 | 116 | 115 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |

Section Full Extent
Route Hayes Road
Link Locality:

Hayes Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| Development Traffic (veh/h) | | | 0 | 12 | 13 | 13 | 14 | 15 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 8 | 8 | 8 | 27 | 28 | 28 | 31 | 32 | 27 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section Full Extent
Route Hayes Road
Link Locality:

Hayes Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| Development Traffic (veh/h) | | | 0 | 12 | 13 | 13 | 14 | 15 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 8 | 8 | 8 | 27 | 28 | 28 | 31 | 32 | 27 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section: Btwn Rosewood Laidley Rd and Waters Rd
Route: Lane Road
Link Locality:

Lane Road - Btwn Rosewood Laidley Rd and Waters Rd

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 162 | 166 | 169 | 172 | 176 | 179 | 183 | 187 | 190 | 194 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Average Annual Daily Traffic (AADT) | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 162 | 166 | 169 | 172 | 176 | 179 | 183 | 187 | 190 | 194 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 |
| Development Traffic (veh/h) | | | 0 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 13 | 13 | 13 | 43 | 44 | 44 | 45 | 44 | 45 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section: Btwn Rosewood Laidley Rd and Waters Rd
Route: Lane Road
Link Locality:

Lane Road - Btwn Rosewood Laidley Rd and Waters Rd

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 101 | 103 | 105 | 107 | 109 | 112 | 114 | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 162 | 166 | 169 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Average Annual Daily Traffic (AADT) | 101 | 103 | 105 | 107 | 109 | 112 | 114 | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 162 | 166 | 169 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 |
| Development Traffic (veh/h) | | | 0 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 11 | 11 | 11 | 41 | 42 | 43 | 43 | 42 | 43 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section: Between Cunningham Highway and Bill Morrow Road
Route: Middle Road
Link Locality:

Middle Road - Between Cunningham Highway and Bill Morrow Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 |
| Total vehicles (veh/h) | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 207 | 211 | 215 | 220 | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 326 | 333 | 340 | 346 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Two Lane Highway Link Analysis: (Northbound)

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 |
| Total vehicles (veh/h) | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Average Annual Daily Traffic (AADT) | 207 | 211 | 215 | 220 | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 326 | 333 | 340 | 346 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 19 | 9 | 9 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 23 | 24 | 24 | 37 | 37 | 54 | 39 | 40 | 40 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section: Between Cunningham Highway and Bill Morrow Road
Route: Middle Road
Link Locality:

Middle Road - Between Cunningham Highway and Bill Morrow Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Total vehicles (veh/h) | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 261 | 266 | 272 | 277 | 283 | 288 | 294 | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 344 | 351 | 358 | 365 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Two Lane Highway Link Analysis: (Southbound)

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Total vehicles (veh/h) | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Average Annual Daily Traffic (AADT) | 261 | 266 | 272 | 277 | 283 | 288 | 294 | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 344 | 351 | 358 | 365 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 19 | 9 | 9 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 27 | 28 | 29 | 41 | 42 | 59 | 44 | 44 | 44 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Not Done Yet

Section Between Ipswich Boonah Road and Shepherd Road
Route Mount Flinders Road
Link Locality:

Mount Flinders Road - Between Ipswich Boonah Road and Shepherd Road — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 | 63 | 65 | 66 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 369 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 | 63 | 65 | 66 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 | 63 | 65 | 66 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Average Annual Daily Traffic (AADT) | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 369 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 |
| Development Traffic (veh/h) | | | 0 | 12 | 12 | 12 | 13 | 13 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 41 | 42 | 43 | 62 | 63 | 64 | 66 | 67 | 66 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

Section Between Ipswich Boonah Road and Shepherd Road
Route Mount Flinders Road
Link Locality:

Mount Flinders Road - Between Ipswich Boonah Road and Shepherd Road — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 259 | 264 | 269 | 275 | 280 | 286 | 292 | 297 | 303 | 309 | 316 | 322 | 328 | 335 | 342 | 348 | 355 | 363 | 370 | 377 | 385 | 392 | 400 | 408 | 416 | 425 | 433 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Average Annual Daily Traffic (AADT) | 259 | 264 | 269 | 275 | 280 | 286 | 292 | 297 | 303 | 309 | 316 | 322 | 328 | 335 | 342 | 348 | 355 | 363 | 370 | 377 | 385 | 392 | 400 | 408 | 416 | 425 | 433 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| Development Traffic (veh/h) | | | 0 | 12 | 12 | 12 | 13 | 13 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 41 | 41 | 42 | 61 | 62 | 63 | 66 | 67 | 66 | 49 | 49 | 50 | 51 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

Section Between Ebenezer Road and Paynes Road
Route Mount Forbes Road
Link Locality:

Mount Forbes Road - Between Ebenezer Road and Paynes Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
| Total vehicles (veh/h) | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 354 | 361 | 368 | 375 | 383 | 390 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
| Total vehicles (veh/h) | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 354 | 361 | 368 | 375 | 383 | 390 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 9 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 25 | 25 | 26 | 38 | 39 | 40 | 40 | 42 | 41 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section Between Ebenezer Road and Paynes Road
Route Mount Forbes Road
Link Locality:

Mount Forbes Road - Between Ebenezer Road and Paynes Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 229 | 234 | 239 | 243 | 248 | 253 | 258 | 264 | 269 | 274 | 280 | 285 | 291 | 297 | 303 | 309 | 315 | 321 | 328 | 334 | 341 | 348 | 355 | 362 | 369 | 376 | 384 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 | 41 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 229 | 234 | 239 | 243 | 248 | 253 | 258 | 264 | 269 | 274 | 280 | 285 | 291 | 297 | 303 | 309 | 315 | 321 | 328 | 334 | 341 | 348 | 355 | 362 | 369 | 376 | 384 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 | 41 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 9 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 25 | 25 | 26 | 38 | 39 | 40 | 40 | 42 | 41 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 | 41 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section Full Extent
Route Mount Marrow Quarry Road
Link Locality:

Mount Marrow Quarry Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 |
| Total vehicles (veh/h) | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 202 | 206 | 210 | 214 | 219 | 223 | 227 | 232 | 237 | 241 | 246 | 251 | 256 | 261 | 267 | 272 | 277 | 283 | 289 | 294 | 300 | 306 | 312 | 319 | 325 | 331 | 338 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 |
| Total vehicles (veh/h) | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Average Annual Daily Traffic (AADT) | 202 | 206 | 210 | 214 | 219 | 223 | 227 | 232 | 237 | 241 | 246 | 251 | 256 | 261 | 267 | 272 | 277 | 283 | 289 | 294 | 300 | 306 | 312 | 319 | 325 | 331 | 338 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 25 | 26 | 26 | 27 | 28 | 28 | 31 | 31 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section Full Extent
Route Mount Marrow Quarry Road
Link Locality:

Mount Marrow Quarry Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 |
| Light Vehicle Volume (veh/h) | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 |
| LoS C Ultimate Capacity (pc/h/ln) | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 |
| LoS D Ultimate Capacity (pc/h/ln) | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 |
| LoS E Ultimate Capacity (pc/h/ln) | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 |
| Total vehicles (veh/h) | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 205 | 209 | 213 | 218 | 222 | 226 | 231 | 235 | 240 | 245 | 250 | 255 | 260 | 265 | 270 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Design Hour Volume (ADT x 30th Highest Factor) | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 | 47 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 |
| Light Vehicle Volume (veh/h) | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 | 484 |
| LoS C Ultimate Capacity (pc/h/ln) | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 | 792 |
| LoS D Ultimate Capacity (pc/h/ln) | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 | 1342 |
| LoS E Ultimate Capacity (pc/h/ln) | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 | 2288 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 |
| Total vehicles (veh/h) | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Average Annual Daily Traffic (AADT) | 205 | 209 | 213 | 218 | 222 | 226 | 231 | 235 | 240 | 245 | 250 | 255 | 260 | 265 | 270 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 | 47 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 28 | 29 | 29 | 30 | 30 | 31 | 34 | 34 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 | 47 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section: Between Lane Road and Strongs Road
Route: Old Grandchester Road
Link Locality:

Old Grandchester Road - Between Lane Road and Strongs Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Development Traffic (veh/h) | | | 0 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 3 | 3 | 21 | 21 | 21 | 21 | 21 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section: Between Lane Road and Strongs Road
Route: Old Grandchester Road
Link Locality:

Old Grandchester Road - Between Lane Road and Strongs Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Development Traffic (veh/h) | | | 0 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 3 | 3 | 21 | 21 | 21 | 21 | 21 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section: Between Champions Way and Mount Forbes Road
Route: Paynes Road
Link Locality:

Paynes Road - Between Champions Way and Mount Forbes Road — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 |
| Total vehicles (veh/h) | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 88 | 89 | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 451 | 460 | 469 | 479 | 488 | 498 | 508 | 518 | 529 | 539 | 550 | 561 | 572 | 584 | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 697 | 711 | 726 | 740 | 755 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 88 | 89 | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 99 | 101 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 |
| Total vehicles (veh/h) | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 88 | 89 | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Average Annual Daily Traffic (AADT) | 451 | 460 | 469 | 479 | 488 | 498 | 508 | 518 | 529 | 539 | 550 | 561 | 572 | 584 | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 697 | 711 | 726 | 740 | 755 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 99 | 101 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 |
| Development Traffic (veh/h) | | | 0 | 8 | 9 | 9 | 10 | 11 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 71 | 72 | 74 | 87 | 91 | 93 | 95 | 98 | 95 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 99 | 101 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |

Section: Between Champions Way and Mount Forbes Road
Route: Paynes Road
Link Locality:

Paynes Road - Between Champions Way and Mount Forbes Road — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Average Annual Daily Traffic (AADT) | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| Development Traffic (veh/h) | | | 0 | 8 | 9 | 9 | 10 | 11 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 13 | 13 | 14 | 26 | 28 | 29 | 30 | 32 | 27 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section Between Coveney Road and Rileys Road
Route Strongs Road
Link Locality:

Strongs Road - Between Coveney Road and Rileys Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 1 | 2 | 3 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 4 | 4 | 4 | 5 | 5 | 8 | 9 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section Between Coveney Road and Rileys Road
Route Strongs Road
Link Locality:

Strongs Road - Between Coveney Road and Rileys Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 1 | 2 | 3 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 4 | 4 | 4 | 5 | 5 | 8 | 9 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section Full Extent
Route T Morrows Road
Link Locality:

T Morrows Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Average Annual Daily Traffic (AADT) | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Average Annual Daily Traffic (AADT) | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 5 | 5 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 19 | 19 | 19 | 20 | 20 | 21 | 28 | 28 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section Full Extent
Route T Morrows Road
Link Locality:

T Morrows Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 | 116 | 118 | 120 | 123 | 125 | 128 | 130 | 133 | 135 | 138 | 141 | 144 | 147 | 150 | 153 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Average Annual Daily Traffic (AADT) | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 | 116 | 118 | 120 | 123 | 125 | 128 | 130 | 133 | 135 | 138 | 141 | 144 | 147 | 150 | 153 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 5 | 5 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 19 | 19 | 20 | 20 | 20 | 21 | 28 | 29 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

| | |
|---|---|
| Section | Between Mount Marrow Quarry Road and Karrabin Rosewood Road |
| Route | Thagoona Haigslea Road |
| Link Locality: | |

Thagoona Haigslea Road - Between Mount Marrow Quarry Road and Karrabin Rosewo Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 232 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 300 | 306 | 312 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 232 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 300 | 306 | 312 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 30 | 31 | 31 | 32 | 33 | 33 | 36 | 36 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

| | |
|---|---|
| Section | Between Mount Marrow Quarry Road and Karrabin Rosewood Road |
| Route | Thagoona Haigslea Road |
| Link Locality: | |

Thagoona Haigslea Road - Between Mount Marrow Quarry Road and Karrabin Rosewo Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 232 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 300 | 306 | 312 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 232 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 300 | 306 | 312 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 30 | 31 | 31 | 32 | 33 | 33 | 36 | 36 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

| | |
|---|---|
| Section | Between Lane Road and Kuss Road |
| Route | Waters Road |
| Link Locality: | |

Waters Road - Between Lane Road and Kuss Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Average Annual Daily Traffic (AADT) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 6 | 7 | 7 | 19 | 20 | 20 | 20 | 19 | 20 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Lane Road and Kuss Road |
| Route | Waters Road |
| Link Locality: | |

Waters Road - Between Lane Road and Kuss Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Average Annual Daily Traffic (AADT) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 11 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 6 | 7 | 7 | 19 | 19 | 20 | 20 | 19 | 19 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between LCC Council Boundary and Wyatt Road |
| Route | Kilmoylar Road |
| Link Locality: | |

Kilmoylar Road - Between LCC Council Boundary and Wyatt Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 172 | 175 | 179 | 182 | 186 | 190 | 194 | 198 | 201 | 206 | 210 | 214 | 218 | 222 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Average Annual Daily Traffic (AADT) | 172 | 175 | 179 | 182 | 186 | 190 | 194 | 198 | 201 | 206 | 210 | 214 | 218 | 222 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 28 | 28 | 29 | 113 | 115 | 117 | 119 | 121 | 116 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

| | |
|---|---|
| Section | Between LCC Council Boundary and Wyatt Road |
| Route | Kilmoylar Road |
| Link Locality: | |

Kilmoylar Road - Between LCC Council Boundary and Wyatt Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 172 | 175 | 179 | 182 | 186 | 190 | 194 | 198 | 201 | 206 | 210 | 214 | 218 | 222 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Average Annual Daily Traffic (AADT) | 172 | 175 | 179 | 182 | 186 | 190 | 194 | 198 | 201 | 206 | 210 | 214 | 218 | 222 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 28 | 28 | 29 | 113 | 115 | 117 | 119 | 121 | 116 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section: Between Mount Lindesay Highway and LCC Council Boundary
Route: Undullah Road
Link Locality:

Undullah Road - Between Mount Lindesay Highway and LCC Council Boundary — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Average Annual Daily Traffic (AADT) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 |
| Development Traffic (veh/h) | | | 0 | 68 | 69 | 69 | 69 | 69 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 10 | 10 | 10 | 112 | 113 | 114 | 114 | 114 | 113 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section: Between Mount Lindesay Highway and LCC Council Boundary
Route: Undullah Road
Link Locality:

Undullah Road - Between Mount Lindesay Highway and LCC Council Boundary — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 62 | 63 | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 9 | 9 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Average Annual Daily Traffic (AADT) | 62 | 63 | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| Development Traffic (veh/h) | | | 0 | 68 | 69 | 69 | 69 | 69 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 10 | 10 | 10 | 112 | 113 | 114 | 114 | 114 | 113 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

| | |
|---|---|
| Section | Between Wyatt Road and Wild Pig Creek Road |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between Wyatt Road and Wild Pig Creek Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 90 | 91 | 93 | 94 | 95 | 90 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Wyatt Road and Wild Pig Creek Road |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between Wyatt Road and Wild Pig Creek Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 90 | 91 | 93 | 94 | 95 | 90 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Kilmoylar Road and Undullah Road |
| Route | Wyatt Road |
| Link Locality: | |

Wyatt Road - Between Kilmoylar Road and Undullah Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 8 | 8 | 8 | 92 | 94 | 96 | 97 | 98 | 93 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

| | |
|---|---|
| Section | Between Kilmoylar Road and Undullah Road |
| Route | Wyatt Road |
| Link Locality: | |

Wyatt Road - Between Kilmoylar Road and Undullah Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 8 | 8 | 8 | 92 | 94 | 96 | 97 | 98 | 93 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section: Between Mount Lindesay Highway and Brookland Road
Route: Allan Creek Road
Link Locality:

Allan Creek Road - Between Mount Lindesay Highway and Brookland Road — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 | 64 | 64 | 65 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 |
| Total vehicles (veh/h) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 305 | 311 | 317 | 324 | 330 | 337 | 344 | 350 | 357 | 365 | 372 | 379 | 387 | 395 | 402 | 411 | 419 | 427 | 436 | 444 | 453 | 462 | 472 | 481 | 491 | 500 | 510 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 | 64 | 65 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 |
| Total vehicles (veh/h) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 305 | 311 | 317 | 324 | 330 | 337 | 344 | 350 | 357 | 365 | 372 | 379 | 387 | 395 | 402 | 411 | 419 | 427 | 436 | 444 | 453 | 462 | 472 | 481 | 491 | 500 | 510 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 11 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 49 | 50 | 51 | 52 | 55 | 70 | 72 | 63 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 |

Section: Between Mount Lindesay Highway and Brookland Road
Route: Allan Creek Road
Link Locality:

Allan Creek Road - Between Mount Lindesay Highway and Brookland Road — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 |
| Total vehicles (veh/h) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 305 | 311 | 317 | 324 | 330 | 337 | 344 | 350 | 357 | 365 | 372 | 379 | 387 | 395 | 402 | 411 | 419 | 427 | 436 | 444 | 453 | 462 | 472 | 481 | 491 | 500 | 510 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 |
| Total vehicles (veh/h) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 305 | 311 | 317 | 324 | 330 | 337 | 344 | 350 | 357 | 365 | 372 | 379 | 387 | 395 | 402 | 411 | 419 | 427 | 436 | 444 | 453 | 462 | 472 | 481 | 491 | 500 | 510 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 11 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 49 | 50 | 51 | 52 | 55 | 70 | 72 | 63 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 |

Section: Btwn Allan Creek Rd and Beaudesert Boonah Rd
Route: Bromelton House Road
Link Locality:

Bromelton House Road - Btwn Allan Creek Rd and Beaudesert Boonah Rd — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 |
| Total vehicles (veh/h) | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 593 | 605 | 617 | 629 | 642 | 655 | 668 | 681 | 695 | 709 | 723 | 737 | 752 | 767 | 782 | 798 | 814 | 830 | 847 | 864 | 881 | 899 | 917 | 935 | 954 | 973 | 992 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 101 | 103 | 105 | 107 | 109 | 112 | 114 | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 |
| Total vehicles (veh/h) | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Average Annual Daily Traffic (AADT) | 593 | 605 | 617 | 629 | 642 | 655 | 668 | 681 | 695 | 709 | 723 | 737 | 752 | 767 | 782 | 798 | 814 | 830 | 847 | 864 | 881 | 899 | 917 | 935 | 954 | 973 | 992 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 101 | 103 | 105 | 107 | 109 | 112 | 114 | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 11 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 101 | 103 | 105 | 107 | 111 | 127 | 130 | 123 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |

Section: Btwn Allan Creek Rd and Beaudesert Boonah Rd
Route: Bromelton House Road
Link Locality:

Bromelton House Road - Btwn Allan Creek Rd and Beaudesert Boonah Rd — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 |
| Total vehicles (veh/h) | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 593 | 605 | 617 | 629 | 642 | 655 | 668 | 681 | 695 | 709 | 723 | 737 | 752 | 767 | 782 | 798 | 814 | 830 | 847 | 864 | 881 | 899 | 917 | 935 | 954 | 973 | 992 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 101 | 103 | 105 | 107 | 109 | 112 | 114 | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 |
| Total vehicles (veh/h) | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Average Annual Daily Traffic (AADT) | 593 | 605 | 617 | 629 | 642 | 655 | 668 | 681 | 695 | 709 | 723 | 737 | 752 | 767 | 782 | 798 | 814 | 830 | 847 | 864 | 881 | 899 | 917 | 935 | 954 | 973 | 992 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 101 | 103 | 105 | 107 | 109 | 112 | 114 | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 11 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 101 | 103 | 105 | 107 | 111 | 127 | 130 | 123 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 141 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |

| | |
|---|---|
| Section | Btwn Undullah Rd and Allan Creek Rd |
| Route | Brookland Road |
| Link Locality: | |

Brookland Road - Btwn Undullah Rd and Allan Creek Rd — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 224 | 228 | 233 | 238 | 242 | 247 | 252 | 257 | 262 | 268 | 273 | 279 | 284 | 290 | 296 | 301 | 308 | 314 | 320 | 326 | 333 | 340 | 346 | 353 | 360 | 367 | 375 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 224 | 228 | 233 | 238 | 242 | 247 | 252 | 257 | 262 | 268 | 273 | 279 | 284 | 290 | 296 | 301 | 308 | 314 | 320 | 326 | 333 | 340 | 346 | 353 | 360 | 367 | 375 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 11 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 24 | 25 | 25 | 26 | 28 | 42 | 44 | 34 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

| | |
|---|---|
| Section | Btwn Undullah Rd and Allan Creek Rd |
| Route | Brookland Road |
| Link Locality: | |

Brookland Road - Btwn Undullah Rd and Allan Creek Rd — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
| Total vehicles (veh/h) | 25 | 25 | 25 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 245 | 250 | 255 | 260 | 265 | 270 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 25 | 25 | 25 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
| Total vehicles (veh/h) | 25 | 25 | 25 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Average Annual Daily Traffic (AADT) | 245 | 250 | 255 | 260 | 265 | 270 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 11 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 26 | 27 | 28 | 28 | 30 | 45 | 46 | 37 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section Full Extent
Route Dwyers Road
Link Locality:

Dwyers Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 9 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 2 | 2 | 2 | 14 | 14 | 15 | 15 | 16 | 15 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section Full Extent
Route Dwyers Road
Link Locality:

Dwyers Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 9 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 2 | 2 | 2 | 14 | 14 | 15 | 15 | 16 | 15 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Btwn Beaudesert Boonah Rd and Thiedke Rd |
| Route | Ilbogan Road |
| Link Locality: | |

Ilbogan Road - Btwn Beaudesert Boonah Rd and Thiedke Rd

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 179 | 183 | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 299 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Average Annual Daily Traffic (AADT) | 179 | 183 | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 299 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 29 | 30 | 30 | 31 | 31 | 32 | 34 | 37 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

| | |
|---|---|
| Section | Btwn Beaudesert Boonah Rd and Thiedke Rd |
| Route | Ilbogan Road |
| Link Locality: | |

Ilbogan Road - Btwn Beaudesert Boonah Rd and Thiedke Rd

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 179 | 183 | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 299 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Total vehicles (veh/h) | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Average Annual Daily Traffic (AADT) | 179 | 183 | 186 | 190 | 194 | 198 | 202 | 206 | 210 | 214 | 218 | 223 | 227 | 231 | 236 | 241 | 246 | 251 | 256 | 261 | 266 | 271 | 277 | 282 | 288 | 294 | 299 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 29 | 30 | 30 | 31 | 31 | 32 | 34 | 37 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

| | |
|---|---|
| Section | Between Undullah Road and LCC Council Boundary |
| Route | Kilmoylar Road |
| Link Locality: | |

Kilmoylar Road - Between Undullah Road and LCC Council Boundary

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 271 | 277 | 282 | 288 | 293 | 299 | 305 | 311 | 318 | 324 | 330 | 337 | 344 | 351 | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 427 | 436 | 445 | 454 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Average Annual Daily Traffic (AADT) | 271 | 277 | 282 | 288 | 293 | 299 | 305 | 311 | 318 | 324 | 330 | 337 | 344 | 351 | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 427 | 436 | 445 | 454 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 42 | 43 | 44 | 129 | 131 | 134 | 136 | 138 | 134 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

| | |
|---|---|
| Section | Between Undullah Road and LCC Council Boundary |
| Route | Kilmoylar Road |
| Link Locality: | |

Kilmoylar Road - Between Undullah Road and LCC Council Boundary

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 271 | 277 | 282 | 288 | 293 | 299 | 305 | 311 | 318 | 324 | 330 | 337 | 344 | 351 | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 427 | 436 | 445 | 454 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 | 62 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Total vehicles (veh/h) | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 67 | 68 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Average Annual Daily Traffic (AADT) | 271 | 277 | 282 | 288 | 293 | 299 | 305 | 311 | 318 | 324 | 330 | 337 | 344 | 351 | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 427 | 436 | 445 | 454 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 59 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 42 | 43 | 44 | 129 | 131 | 134 | 136 | 138 | 134 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

| | |
|---|---|
| Section | Between Peak Crossing Churchbank Weir Rd and Cunningham Highway |
| Route | Mutdapilly Churchbank Weir Road |
| Link Locality: | |

Mutdapilly Churchbank Weir Road - Between Peak Crossing Churchbank Weir Rd and Cu Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| Development Traffic (veh/h) | | | 0 | 0 | 2 | 2 | 2 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 13 | 13 | 13 | 14 | 17 | 17 | 18 | 18 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

| | |
|---|---|
| Section | Between Peak Crossing Churchbank Weir Rd and Cunningham Highway |
| Route | Mutdapilly Churchbank Weir Road |
| Link Locality: | |

Mutdapilly Churchbank Weir Road - Between Peak Crossing Churchbank Weir Rd and Cu Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| Development Traffic (veh/h) | | | 0 | 0 | 2 | 2 | 2 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 13 | 13 | 13 | 14 | 17 | 17 | 18 | 18 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

| | |
|---|---|
| Section | Between Warrill View Peak Crossing Road and Mutdapilly Churchbank Weir Rd |
| Route | Peak Crossing Churchbank Weir Road |
| Link Locality: | |

Peak Crossing Churchbank Weir Road - Between Warrill View Peak Crossing Road and Mutdapilly Churchbank Weir Rd - Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 | 140 | 143 | 146 | 149 | 152 | 155 | 158 | 161 | 164 | 167 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 | 140 | 143 | 146 | 149 | 152 | 155 | 158 | 161 | 164 | 167 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 16 | 16 | 17 | 17 | 19 | 19 | 20 | 20 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

| | |
|---|---|
| Section | Between Warrill View Peak Crossing Road and Mutdapilly Churchbank Weir Rd |
| Route | Peak Crossing Churchbank Weir Road |
| Link Locality: | |

Peak Crossing Churchbank Weir Road - Between Warrill View Peak Crossing Road and Mutdapilly Churchbank Weir Rd - Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 | 140 | 143 | 146 | 149 | 152 | 155 | 158 | 161 | 164 | 167 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 120 | 122 | 124 | 127 | 129 | 132 | 135 | 137 | 140 | 143 | 146 | 149 | 152 | 155 | 158 | 161 | 164 | 167 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 16 | 16 | 17 | 17 | 19 | 19 | 20 | 20 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section: Btwn Ilbogan Road and Mt Lindesay Highway
Route: Thiedke Road
Link Locality:

Thiedke Road - Btwn Ilbogan Road and Mt Lindesay Highway

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 149 | 152 | 155 | 158 | 161 | 165 | 168 | 171 | 175 | 178 | 182 | 186 | 189 | 193 | 197 | 201 | 205 | 209 | 213 | 217 | 222 | 226 | 231 | 235 | 240 | 245 | 250 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 149 | 152 | 155 | 158 | 161 | 165 | 168 | 171 | 175 | 178 | 182 | 186 | 189 | 193 | 197 | 201 | 205 | 209 | 213 | 217 | 222 | 226 | 231 | 235 | 240 | 245 | 250 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 31 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section: Btwn Ilbogan Road and Mt Lindesay Highway
Route: Thiedke Road
Link Locality:

Thiedke Road - Btwn Ilbogan Road and Mt Lindesay Highway

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 149 | 152 | 155 | 158 | 161 | 165 | 168 | 171 | 175 | 178 | 182 | 186 | 189 | 193 | 197 | 201 | 205 | 209 | 213 | 217 | 222 | 226 | 231 | 235 | 240 | 245 | 250 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 149 | 152 | 155 | 158 | 161 | 165 | 168 | 171 | 175 | 178 | 182 | 186 | 189 | 193 | 197 | 201 | 205 | 209 | 213 | 217 | 222 | 226 | 231 | 235 | 240 | 245 | 250 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 31 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

| | |
|---|---|
| Section | Between LCC Council Boundary and Brookland Rd |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between LCC Council Boundary and Brookland Rd — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 68 | 69 | 69 | 69 | 69 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 108 | 109 | 109 | 109 | 109 | 108 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between LCC Council Boundary and Brookland Rd |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between LCC Council Boundary and Brookland Rd — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 68 | 69 | 69 | 69 | 69 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 108 | 109 | 109 | 109 | 109 | 108 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Brookland Road and Kilmoylar Road |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between Brookland Road and Kilmoylar Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 68 | 69 | 79 | 80 | 73 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 108 | 110 | 124 | 126 | 115 | 108 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Brookland Road and Kilmoylar Road |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between Brookland Road and Kilmoylar Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 68 | 69 | 79 | 80 | 73 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 108 | 110 | 124 | 126 | 115 | 108 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Kilmoylar Rd and S of Brennans Dip Road |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between Kilmoylar Rd and S of Brennans Dip Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 12 | 13 | 13 | 13 | 13 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 24 | 25 | 25 | 25 | 26 | 24 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Kilmoylar Rd and S of Brennans Dip Road |
| Route | Undullah Road |
| Link Locality: | |

Undullah Road - Between Kilmoylar Rd and S of Brennans Dip Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Average Annual Daily Traffic (AADT) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| Development Traffic (veh/h) | | | 0 | 12 | 13 | 13 | 13 | 13 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 5 | 5 | 6 | 24 | 25 | 25 | 25 | 26 | 24 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | |
|---|---|
| Section | Between Ipswich Boonah Rd to 5.5k E of Ipswich Boonah Rd |
| Route | Washpool Road |
| Link Locality: | |

Washpool Road - Between Ipswich Boonah Rd to 5.5k E of Ipswich Boonah Rd — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Average Annual Daily Traffic (AADT) | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 |
| Development Traffic (veh/h) | | | 0 | 28 | 36 | 47 | 30 | 31 | 28 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 9 | 9 | 9 | 51 | 64 | 80 | 55 | 56 | 52 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

| | |
|---|---|
| Section | Between Ipswich Boonah Rd to 5.5k E of Ipswich Boonah Rd |
| Route | Washpool Road |
| Link Locality: | |

Washpool Road - Between Ipswich Boonah Rd to 5.5k E of Ipswich Boonah Rd — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 78 | 80 | 81 | 83 | 84 | 86 | 88 | 90 | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 114 | 116 | 118 | 121 | 123 | 125 | 128 | 131 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Light Vehicle Volume (veh/h) | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| Average Annual Daily Traffic (AADT) | 78 | 80 | 81 | 83 | 84 | 86 | 88 | 90 | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 114 | 116 | 118 | 121 | 123 | 125 | 128 | 131 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 |
| Development Traffic (veh/h) | | | 0 | 28 | 36 | 47 | 30 | 31 | 28 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 9 | 9 | 9 | 51 | 64 | 80 | 55 | 56 | 52 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section Full Extent
Route Wild Pig Creek Road
Link Locality:

Wild Pig Creek Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 60 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 6 | 7 | 7 | 91 | 92 | 94 | 96 | 97 | 91 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section Full Extent
Route Wild Pig Creek Road
Link Locality:

Wild Pig Creek Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Total vehicles (veh/h) | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| Development Traffic (veh/h) | | | 0 | 56 | 57 | 58 | 59 | 60 | 56 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 6 | 7 | 7 | 91 | 92 | 94 | 96 | 97 | 91 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section: Between Ipswich Boonah Road and Wyaralong Dam Access
Route: Beaudesert Boonah Road
Link Locality:

## Beaudesert Boonah Road - Between Ipswich Boonah Road and Wyaralong Dam Access Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 246 | 251 | 256 | 261 | 267 | 272 | 278 | 283 | 289 | 294 | 300 | 306 | 313 | 319 | 325 | 332 | 338 | 345 | 352 | 359 | 366 | 373 | 381 | 389 | 396 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 269 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

### Two Lane Highway Link Analysis: (Northbound)

## Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 246 | 251 | 256 | 261 | 267 | 272 | 278 | 283 | 289 | 294 | 300 | 306 | 313 | 319 | 325 | 332 | 338 | 345 | 352 | 359 | 366 | 373 | 381 | 389 | 396 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 269 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 9 | 9 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 269 | 274 | 279 | 285 | 291 | 310 | 316 | 308 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Ipswich Boonah Road and Wyaralong Dam Access
Route: Beaudesert Boonah Road
Link Locality:

## Beaudesert Boonah Road - Between Ipswich Boonah Road and Wyaralong Dam Access Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

### Two Lane Highway Link Analysis: (Southbound)

## Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 9 | 9 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 271 | 276 | 281 | 287 | 293 | 312 | 318 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Wyaralong Dam Access and Tilley Road
Route: Beaudesert Boonah Road
Link Locality:

Beaudesert Boonah Road - Between Wyaralong Dam Access and Tilley Road — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 246 | 251 | 256 | 261 | 267 | 272 | 278 | 283 | 289 | 294 | 300 | 306 | 313 | 319 | 325 | 332 | 338 | 345 | 352 | 359 | 366 | 373 | 381 | 389 | 396 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 269 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 246 | 251 | 256 | 261 | 267 | 272 | 278 | 283 | 289 | 294 | 300 | 306 | 313 | 319 | 325 | 332 | 338 | 345 | 352 | 359 | 366 | 373 | 381 | 389 | 396 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 269 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 10 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 269 | 274 | 279 | 285 | 292 | 312 | 318 | 310 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Wyaralong Dam Access and Tilley Road
Route: Beaudesert Boonah Road
Link Locality:

Beaudesert Boonah Road - Between Wyaralong Dam Access and Tilley Road — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 10 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 271 | 276 | 281 | 287 | 294 | 314 | 320 | 313 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Tilley Road and Sandy Creek Road
Route: Beaudesert Boonah Road
Link Locality:

Beaudesert Boonah Road - Between Tilley Road and Sandy Creek Road — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 10 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 268 | 274 | 279 | 285 | 292 | 312 | 317 | 310 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Tilley Road and Sandy Creek Road
Route: Beaudesert Boonah Road
Link Locality:

Beaudesert Boonah Road - Between Tilley Road and Sandy Creek Road — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 234 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 270 | 276 | 281 | 287 | 293 | 298 | 304 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 426 | 435 | 444 | 452 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 234 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 270 | 276 | 281 | 287 | 293 | 298 | 304 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 426 | 435 | 444 | 452 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 10 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 270 | 276 | 281 | 287 | 294 | 314 | 320 | 312 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 426 | 435 | 444 | 452 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Sandy Creek Road and Bromelton House Road
Route: Beaudesert Boonah Road
Link Locality:

Beaudesert Boonah Road - Between Sandy Creek Road and Bromelton House Road — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 246 | 251 | 256 | 261 | 267 | 272 | 278 | 283 | 289 | 294 | 300 | 306 | 313 | 319 | 325 | 332 | 338 | 345 | 352 | 359 | 366 | 373 | 381 | 389 | 396 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 269 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 246 | 251 | 256 | 261 | 267 | 272 | 278 | 283 | 289 | 294 | 300 | 306 | 313 | 319 | 325 | 332 | 338 | 345 | 352 | 359 | 366 | 373 | 381 | 389 | 396 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 269 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 10 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 269 | 274 | 279 | 285 | 292 | 312 | 318 | 312 | 315 | 321 | 327 | 334 | 341 | 347 | 354 | 361 | 369 | 376 | 384 | 391 | 399 | 407 | 415 | 423 | 432 | 441 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Sandy Creek Road and Bromelton House Road
Route: Beaudesert Boonah Road
Link Locality:

Beaudesert Boonah Road - Between Sandy Creek Road and Bromelton House Road — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 10 | 10 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 271 | 276 | 281 | 287 | 294 | 314 | 320 | 314 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

| | |
|---|---|
| Section | Between Cunningham Highway and Mt Flinders Rd |
| Route | Ipswich Boonah Road |
| Link Locality: | |

Ipswich Boonah Road - Between Cunningham Highway and Mt Flinders Rd

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 379 | 387 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 | 462 | 471 | 481 | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 96 |
| Total vehicles (veh/h) | 436 | 445 | 454 | 463 | 472 | 481 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 | 688 | 701 | 715 | 730 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2907 | 2965 | 3024 | 3085 | 3147 | 3210 | 3274 | 3339 | 3406 | 3474 | 3544 | 3614 | 3687 | 3761 | 3836 | 3912 | 3991 | 4071 | 4152 | 4235 | 4320 | 4406 | 4494 | 4584 | 4676 | 4769 | 4865 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 436 | 445 | 454 | 463 | 472 | 481 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 | 688 | 701 | 715 | 730 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 465 | 474 | 483 | 493 | 503 | 513 | 523 | 534 | 544 | 555 | 566 | 578 | 589 | 601 | 613 | 625 | 638 | 651 | 664 | 677 | 690 | 704 | 718 | 733 | 747 | 762 | 777 |
| LoS Result | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.27 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 379 | 387 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 | 462 | 471 | 481 | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 96 |
| Total vehicles (veh/h) | 436 | 445 | 454 | 463 | 472 | 481 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 | 688 | 701 | 715 | 730 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Average Annual Daily Traffic (AADT) | 2907 | 2965 | 3024 | 3085 | 3147 | 3210 | 3274 | 3339 | 3406 | 3474 | 3544 | 3614 | 3687 | 3761 | 3836 | 3912 | 3991 | 4071 | 4152 | 4235 | 4320 | 4406 | 4494 | 4584 | 4676 | 4769 | 4865 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 465 | 474 | 483 | 493 | 503 | 513 | 523 | 534 | 544 | 555 | 566 | 578 | 589 | 601 | 613 | 625 | 638 | 651 | 664 | 677 | 690 | 704 | 718 | 733 | 747 | 762 | 777 |
| Development Traffic (veh/h) | | | 0 | 64 | 71 | 82 | 73 | 71 | 64 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 465 | 474 | 483 | 589 | 610 | 636 | 633 | 639 | 640 | 555 | 566 | 578 | 589 | 601 | 613 | 625 | 638 | 651 | 664 | 677 | 690 | 704 | 718 | 733 | 747 | 762 | 777 |
| LoS Result | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.20 | 0.21 | 0.21 | 0.26 | 0.27 | 0.28 | 0.28 | 0.28 | 0.28 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.27 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 |

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| Section | Between Cunningham Highway and Mt Flinders Rd |
| Route | Ipswich Boonah Road |
| Link Locality: | |

Ipswich Boonah Road - Between Cunningham Highway and Mt Flinders Rd

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 417 | 425 | 434 | 442 | 451 | 460 | 469 | 479 | 488 | 498 | 508 | 518 | 529 | 539 | 550 | 561 | 572 | 584 | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 697 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 60 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 |
| Total vehicles (veh/h) | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 | 683 | 696 | 710 | 725 | 739 | 754 | 769 | 784 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3124 | 3187 | 3250 | 3315 | 3382 | 3449 | 3518 | 3589 | 3661 | 3734 | 3808 | 3885 | 3962 | 4042 | 4122 | 4205 | 4289 | 4375 | 4462 | 4551 | 4642 | 4735 | 4830 | 4927 | 5025 | 5126 | 5228 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 | 683 | 696 | 710 | 725 | 739 | 754 | 769 | 784 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 495 | 504 | 515 | 525 | 535 | 546 | 557 | 568 | 579 | 591 | 603 | 615 | 627 | 640 | 653 | 666 | 679 | 693 | 706 | 720 | 735 | 750 | 765 | 780 | 795 | 811 | 828 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 417 | 425 | 434 | 442 | 451 | 460 | 469 | 479 | 488 | 498 | 508 | 518 | 529 | 539 | 550 | 561 | 572 | 584 | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 697 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 60 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 |
| Total vehicles (veh/h) | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 | 683 | 696 | 710 | 725 | 739 | 754 | 769 | 784 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Average Annual Daily Traffic (AADT) | 3124 | 3187 | 3250 | 3315 | 3382 | 3449 | 3518 | 3589 | 3661 | 3734 | 3808 | 3885 | 3962 | 4042 | 4122 | 4205 | 4289 | 4375 | 4462 | 4551 | 4642 | 4735 | 4830 | 4927 | 5025 | 5126 | 5228 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 495 | 504 | 515 | 525 | 535 | 546 | 557 | 568 | 579 | 591 | 603 | 615 | 627 | 640 | 653 | 666 | 679 | 693 | 706 | 720 | 735 | 750 | 765 | 780 | 795 | 811 | 828 |
| Development Traffic (veh/h) | | | 0 | 64 | 71 | 82 | 73 | 71 | 64 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 495 | 504 | 515 | 621 | 642 | 669 | 667 | 674 | 676 | 591 | 603 | 615 | 627 | 640 | 653 | 666 | 679 | 693 | 706 | 720 | 735 | 750 | 765 | 780 | 795 | 811 | 828 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.22 | 0.22 | 0.23 | 0.27 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 |

Section: Between Mt Flinders Rd and Warrill View Peak Crossing Rd
Route: Ipswich Boonah Road
Link Locality:

Ipswich Boonah Road - Between Mt Flinders Rd and Warrill View Peak Crossing Rd — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 379 | 387 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 | 462 | 471 | 481 | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 96 |
| Total vehicles (veh/h) | 436 | 445 | 454 | 463 | 472 | 481 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 | 688 | 701 | 715 | 730 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2907 | 2965 | 3024 | 3085 | 3147 | 3210 | 3274 | 3339 | 3406 | 3474 | 3544 | 3614 | 3687 | 3761 | 3836 | 3912 | 3991 | 4071 | 4152 | 4235 | 4320 | 4406 | 4494 | 4584 | 4676 | 4769 | 4865 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 436 | 445 | 454 | 463 | 472 | 481 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 | 688 | 701 | 715 | 730 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 465 | 474 | 483 | 493 | 503 | 513 | 523 | 534 | 544 | 555 | 566 | 578 | 589 | 601 | 613 | 625 | 638 | 651 | 664 | 677 | 690 | 704 | 718 | 733 | 747 | 762 | 777 |
| LoS Result | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.27 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 379 | 387 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 | 462 | 471 | 481 | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 96 |
| Total vehicles (veh/h) | 436 | 445 | 454 | 463 | 472 | 481 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 | 688 | 701 | 715 | 730 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Average Annual Daily Traffic (AADT) | 2907 | 2965 | 3024 | 3085 | 3147 | 3210 | 3274 | 3339 | 3406 | 3474 | 3544 | 3614 | 3687 | 3761 | 3836 | 3912 | 3991 | 4071 | 4152 | 4235 | 4320 | 4406 | 4494 | 4584 | 4676 | 4769 | 4865 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 465 | 474 | 483 | 493 | 503 | 513 | 523 | 534 | 544 | 555 | 566 | 578 | 589 | 601 | 613 | 625 | 638 | 651 | 664 | 677 | 690 | 704 | 718 | 733 | 747 | 762 | 777 |
| Development Traffic (veh/h) | | | 0 | 36 | 44 | 55 | 46 | 39 | 36 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 465 | 474 | 483 | 547 | 569 | 595 | 592 | 592 | 598 | 555 | 566 | 578 | 589 | 601 | 613 | 625 | 638 | 651 | 664 | 677 | 690 | 704 | 718 | 733 | 747 | 762 | 777 |
| LoS Result | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.20 | 0.21 | 0.21 | 0.24 | 0.25 | 0.26 | 0.26 | 0.26 | 0.26 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.27 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 |

Section: Between Mt Flinders Rd and Warrill View Peak Crossing Rd
Route: Ipswich Boonah Road
Link Locality:

Ipswich Boonah Road - Between Mt Flinders Rd and Warrill View Peak Crossing Rd — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 417 | 425 | 434 | 442 | 451 | 460 | 469 | 479 | 488 | 498 | 508 | 518 | 529 | 539 | 550 | 561 | 572 | 584 | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 697 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 60 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 |
| Total vehicles (veh/h) | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 | 683 | 696 | 710 | 725 | 739 | 754 | 769 | 784 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3124 | 3187 | 3250 | 3315 | 3382 | 3449 | 3518 | 3589 | 3661 | 3734 | 3808 | 3885 | 3962 | 4042 | 4122 | 4205 | 4289 | 4375 | 4462 | 4551 | 4642 | 4735 | 4830 | 4927 | 5025 | 5126 | 5228 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 | 683 | 696 | 710 | 725 | 739 | 754 | 769 | 784 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 495 | 504 | 515 | 525 | 535 | 546 | 557 | 568 | 579 | 591 | 603 | 615 | 627 | 640 | 653 | 666 | 679 | 693 | 706 | 720 | 735 | 750 | 765 | 780 | 795 | 811 | 828 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 417 | 425 | 434 | 442 | 451 | 460 | 469 | 479 | 488 | 498 | 508 | 518 | 529 | 539 | 550 | 561 | 572 | 584 | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 697 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 60 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 |
| Total vehicles (veh/h) | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 | 683 | 696 | 710 | 725 | 739 | 754 | 769 | 784 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Average Annual Daily Traffic (AADT) | 3124 | 3187 | 3250 | 3315 | 3382 | 3449 | 3518 | 3589 | 3661 | 3734 | 3808 | 3885 | 3962 | 4042 | 4122 | 4205 | 4289 | 4375 | 4462 | 4551 | 4642 | 4735 | 4830 | 4927 | 5025 | 5126 | 5228 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 495 | 504 | 515 | 525 | 535 | 546 | 557 | 568 | 579 | 591 | 603 | 615 | 627 | 640 | 653 | 666 | 679 | 693 | 706 | 720 | 735 | 750 | 765 | 780 | 795 | 811 | 828 |
| Development Traffic (veh/h) | | | 0 | 36 | 44 | 55 | 46 | 39 | 36 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 495 | 504 | 515 | 579 | 601 | 628 | 626 | 627 | 634 | 591 | 603 | 615 | 627 | 640 | 653 | 666 | 679 | 693 | 706 | 720 | 735 | 750 | 765 | 780 | 795 | 811 | 828 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.22 | 0.22 | 0.23 | 0.25 | 0.26 | 0.28 | 0.27 | 0.27 | 0.28 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 |

Section: Between Warrill View Peak Crossing Road and Dwyers Road
Route: Ipswich Boonah Road
Link Locality:

Ipswich Boonah Road - Between Warrill View Peak Crossing Road and Dwyers Road  Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| Development Traffic (veh/h) | | | 0 | 36 | 44 | 55 | 46 | 39 | 36 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 268 | 274 | 279 | 339 | 357 | 379 | 372 | 367 | 368 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.15 | 0.16 | 0.17 | 0.16 | 0.16 | 0.16 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Warrill View Peak Crossing Road and Dwyers Road
Route: Ipswich Boonah Road
Link Locality:

Ipswich Boonah Road - Between Warrill View Peak Crossing Road and Dwyers Road  Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| Development Traffic (veh/h) | | | 0 | 36 | 44 | 55 | 46 | 39 | 36 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 271 | 276 | 281 | 341 | 359 | 381 | 374 | 369 | 371 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.15 | 0.16 | 0.17 | 0.16 | 0.16 | 0.16 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Dwyers Road and Washpool Road
Route: Ipswich Boonah Road
Link Locality:

Ipswich Boonah Road - Between Dwyers Road and Washpool Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| Development Traffic (veh/h) | | | 0 | 28 | 36 | 47 | 38 | 31 | 28 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 268 | 274 | 279 | 327 | 345 | 367 | 360 | 354 | 356 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.14 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Dwyers Road and Washpool Road
Route: Ipswich Boonah Road
Link Locality:

Ipswich Boonah Road - Between Dwyers Road and Washpool Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| Development Traffic (veh/h) | | | 0 | 28 | 36 | 47 | 38 | 31 | 28 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 271 | 276 | 281 | 329 | 347 | 369 | 362 | 357 | 359 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.14 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

| | |
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| Section | Between Washpool Road and Beaudesert Boonah Road |
| Route | Ipswich Boonah Road |
| Link Locality: | |

Ipswich Boonah Road - Between Washpool Road and Beaudesert Boonah Road — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 | 367 | 374 | 382 | 389 | 397 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 |
| Total vehicles (veh/h) | 258 | 263 | 268 | 274 | 279 | 285 | 291 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Average Annual Daily Traffic (AADT) | 1720 | 1754 | 1789 | 1825 | 1861 | 1899 | 1937 | 1975 | 2015 | 2055 | 2096 | 2138 | 2181 | 2225 | 2269 | 2315 | 2361 | 2408 | 2456 | 2505 | 2555 | 2607 | 2659 | 2712 | 2766 | 2821 | 2878 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 9 | 9 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 268 | 274 | 279 | 285 | 290 | 310 | 316 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 | 383 | 391 | 399 | 407 | 415 | 423 | 432 | 440 | 449 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

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| Section | Between Washpool Road and Beaudesert Boonah Road |
| Route | Ipswich Boonah Road |
| Link Locality: | |

Ipswich Boonah Road - Between Washpool Road and Beaudesert Boonah Road — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 224 | 229 | 233 | 238 | 243 | 247 | 252 | 257 | 263 | 268 | 273 | 279 | 284 | 290 | 296 | 302 | 308 | 314 | 320 | 327 | 333 | 340 | 347 | 353 | 361 | 368 | 375 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| Total vehicles (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 337 | 343 | 350 | 357 | 364 | 372 | 379 | 387 | 394 | 402 | 410 | 418 | 427 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Average Annual Daily Traffic (AADT) | 1700 | 1734 | 1769 | 1804 | 1841 | 1877 | 1915 | 1953 | 1992 | 2032 | 2073 | 2114 | 2156 | 2200 | 2244 | 2288 | 2334 | 2381 | 2429 | 2477 | 2527 | 2577 | 2629 | 2681 | 2735 | 2790 | 2845 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 271 | 276 | 281 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 9 | 9 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 271 | 276 | 281 | 287 | 293 | 312 | 318 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 | 435 | 444 | 453 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 |

Section: Between Cunningham Highway and Ipswich Rosewood Road
Route: Ipswich Rosewood Road
Link Locality:

Ipswich Rosewood Road - Between Cunningham Highway and Ipswich Rosewood RoadNorthbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 497 | 507 | 517 | 527 | 538 | 549 | 559 | 571 | 582 | 594 | 606 | 618 | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 738 | 753 | 768 | 783 | 799 | 815 | 831 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 99 | 100 | 103 | 105 | 107 | 109 | 111 | 113 | 115 | 118 | 120 | 123 | 125 | 127 | 130 | 133 | 135 | 138 | 141 | 144 | 146 | 149 | 152 | 155 | 158 | 162 | 165 |
| Total vehicles (veh/h) | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 698 | 711 | 726 | 740 | 755 | 770 | 786 | 801 | 817 | 834 | 850 | 867 | 885 | 902 | 920 | 939 | 958 | 977 | 996 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3969 | 4048 | 4129 | 4212 | 4296 | 4382 | 4470 | 4559 | 4650 | 4743 | 4838 | 4935 | 5033 | 5134 | 5237 | 5342 | 5448 | 5557 | 5668 | 5782 | 5897 | 6015 | 6136 | 6258 | 6384 | 6511 | 6641 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 698 | 711 | 726 | 740 | 755 | 770 | 786 | 801 | 817 | 834 | 850 | 867 | 885 | 902 | 920 | 939 | 958 | 977 | 996 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 645 | 657 | 671 | 684 | 698 | 712 | 726 | 740 | 755 | 770 | 786 | 801 | 817 | 834 | 851 | 868 | 885 | 903 | 921 | 939 | 958 | 977 | 997 | 1016 | 1037 | 1058 | 1079 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.28 | 0.29 | 0.29 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.37 | 0.37 | 0.38 | 0.39 | 0.40 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.45 | 0.45 | 0.46 | 0.47 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 497 | 507 | 517 | 527 | 538 | 549 | 559 | 571 | 582 | 594 | 606 | 618 | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 738 | 753 | 768 | 783 | 799 | 815 | 831 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 99 | 100 | 103 | 105 | 107 | 109 | 111 | 113 | 115 | 118 | 120 | 123 | 125 | 127 | 130 | 133 | 135 | 138 | 141 | 144 | 146 | 149 | 152 | 155 | 158 | 162 | 165 |
| Total vehicles (veh/h) | 595 | 607 | 619 | 632 | 644 | 657 | 670 | 684 | 698 | 711 | 726 | 740 | 755 | 770 | 786 | 801 | 817 | 834 | 850 | 867 | 885 | 902 | 920 | 939 | 958 | 977 | 996 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Average Annual Daily Traffic (AADT) | 3969 | 4048 | 4129 | 4212 | 4296 | 4382 | 4470 | 4559 | 4650 | 4743 | 4838 | 4935 | 5033 | 5134 | 5237 | 5342 | 5448 | 5557 | 5668 | 5782 | 5897 | 6015 | 6136 | 6258 | 6384 | 6511 | 6641 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 645 | 657 | 671 | 684 | 698 | 712 | 726 | 740 | 755 | 770 | 786 | 801 | 817 | 834 | 851 | 868 | 885 | 903 | 921 | 939 | 958 | 977 | 997 | 1016 | 1037 | 1058 | 1079 |
| Development Traffic (veh/h) | | | 0 | 0 | 17 | 29 | 9 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 645 | 657 | 671 | 684 | 723 | 755 | 739 | 741 | 755 | 770 | 786 | 801 | 817 | 834 | 851 | 868 | 885 | 903 | 921 | 939 | 958 | 977 | 997 | 1016 | 1037 | 1058 | 1079 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.28 | 0.29 | 0.29 | 0.30 | 0.32 | 0.33 | 0.32 | 0.33 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.37 | 0.37 | 0.38 | 0.39 | 0.40 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.45 | 0.45 | 0.46 | 0.47 |

Section: Between Cunningham Highway and Ipswich Rosewood Road
Route: Ipswich Rosewood Road
Link Locality:

Ipswich Rosewood Road - Between Cunningham Highway and Ipswich Rosewood RoadSouthbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 499 | 509 | 519 | 529 | 540 | 550 | 562 | 573 | 584 | 596 | 608 | 620 | 632 | 645 | 658 | 671 | 684 | 698 | 712 | 726 | 741 | 756 | 771 | 786 | 802 | 818 | 834 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 86 | 88 | 89 | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 | 116 | 118 | 120 | 123 | 125 | 128 | 130 | 133 | 135 | 138 | 141 | 144 |
| Total vehicles (veh/h) | 584 | 596 | 608 | 620 | 633 | 645 | 658 | 671 | 685 | 698 | 712 | 727 | 741 | 756 | 771 | 787 | 802 | 818 | 835 | 851 | 868 | 886 | 904 | 922 | 940 | 959 | 978 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3896 | 3974 | 4054 | 4135 | 4218 | 4302 | 4388 | 4476 | 4565 | 4657 | 4750 | 4845 | 4942 | 5040 | 5141 | 5244 | 5349 | 5456 | 5565 | 5676 | 5790 | 5906 | 6024 | 6144 | 6267 | 6392 | 6520 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 584 | 596 | 608 | 620 | 633 | 645 | 658 | 671 | 685 | 698 | 712 | 727 | 741 | 756 | 771 | 787 | 802 | 818 | 835 | 851 | 868 | 886 | 904 | 922 | 940 | 959 | 978 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 627 | 640 | 653 | 666 | 679 | 693 | 707 | 721 | 735 | 750 | 765 | 780 | 796 | 812 | 828 | 844 | 861 | 878 | 896 | 914 | 932 | 951 | 970 | 989 | 1009 | 1029 | 1050 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.43 | 0.44 | 0.45 | 0.46 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 499 | 509 | 519 | 529 | 540 | 550 | 562 | 573 | 584 | 596 | 608 | 620 | 632 | 645 | 658 | 671 | 684 | 698 | 712 | 726 | 741 | 756 | 771 | 786 | 802 | 818 | 834 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 86 | 88 | 89 | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 | 116 | 118 | 120 | 123 | 125 | 128 | 130 | 133 | 135 | 138 | 141 | 144 |
| Total vehicles (veh/h) | 584 | 596 | 608 | 620 | 633 | 645 | 658 | 671 | 685 | 698 | 712 | 727 | 741 | 756 | 771 | 787 | 802 | 818 | 835 | 851 | 868 | 886 | 904 | 922 | 940 | 959 | 978 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 3896 | 3974 | 4054 | 4135 | 4218 | 4302 | 4388 | 4476 | 4565 | 4657 | 4750 | 4845 | 4942 | 5040 | 5141 | 5244 | 5349 | 5456 | 5565 | 5676 | 5790 | 5906 | 6024 | 6144 | 6267 | 6392 | 6520 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 627 | 640 | 653 | 666 | 679 | 693 | 707 | 721 | 735 | 750 | 765 | 780 | 796 | 812 | 828 | 844 | 861 | 878 | 896 | 914 | 932 | 951 | 970 | 989 | 1009 | 1029 | 1050 |
| Development Traffic (veh/h) | | | 0 | 0 | 17 | 29 | 9 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 627 | 640 | 653 | 666 | 704 | 736 | 720 | 721 | 735 | 750 | 765 | 780 | 796 | 812 | 828 | 844 | 861 | 878 | 896 | 914 | 932 | 951 | 970 | 989 | 1009 | 1029 | 1050 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.28 | 0.28 | 0.29 | 0.29 | 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.43 | 0.44 | 0.45 | 0.46 |

| | |
|---|---|
| Section | Between Peak Crossing Churchbank Weir Road and Ipswich Boonah Road |
| Route | Warrill View Peak Crossing Road |
| Link Locality: | |

Warrill View Peak Crossing Road - Between Peak Crossing Churchbank Weir Road and Ipswich Boonah Road - Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 176 | 180 | 184 | 187 | 191 | 195 | 199 | 203 | 207 | 211 | 215 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 15.00% | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 |
| Passenger Car Equivalent Design Flow (pc/h/ln) Vp=L/V+(HV/fHV) - Base Without Development | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Average Annual Daily Traffic (AADT) | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 176 | 180 | 184 | 187 | 191 | 195 | 199 | 203 | 207 | 211 | 215 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| Development Traffic (veh/h) | | | 0 | 0 | 2 | 2 | 2 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - With Development | 21 | 21 | 21 | 22 | 25 | 25 | 26 | 26 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 |

| | |
|---|---|
| Section | Between Peak Crossing Churchbank Weir Road and Ipswich Boonah Road |
| Route | Warrill View Peak Crossing Road |
| Link Locality: | |

Warrill View Peak Crossing Road - Between Peak Crossing Churchbank Weir Road and Ipswich Boonah Road - Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 176 | 180 | 184 | 187 | 191 | 195 | 199 | 203 | 207 | 211 | 215 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Light Vehicle Volume (veh/h) | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| LoS B Ultimate Capacity (pc/h/ln) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| LoS C Ultimate Capacity (pc/h/ln) | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 | 795 |
| LoS D Ultimate Capacity (pc/h/ln) | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 | 1350 |
| LoS E Ultimate Capacity (pc/h/ln) | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 | 2280 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Total vehicles (veh/h) | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Average Annual Daily Traffic (AADT) | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 173 | 176 | 180 | 184 | 187 | 191 | 195 | 199 | 203 | 207 | 211 | 215 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| Development Traffic (veh/h) | | | 0 | 0 | 2 | 2 | 2 | 2 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - With Development | 21 | 21 | 21 | 22 | 25 | 25 | 26 | 26 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 |

Section Full Extent
Route Clark Road
Link Locality:

Clark Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fhHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 80 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 |

Section Full Extent
Route Clark Road
Link Locality:

URBAN MIDBLOCK

Clark Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fhHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 80 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 |

Section Full Extent
Route Hillside Road
Link Locality:

URBAN MIDBLOCK

Hillside Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 8 | 8 | 8 | 21 | 21 | 21 | 21 | 21 | 21 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section Full Extent
Route Hillside Road
Link Locality:

URBAN MIDBLOCK

Hillside Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total vehicles (veh/h) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| Development Traffic (veh/h) | | | 0 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 8 | 8 | 8 | 21 | 21 | 21 | 21 | 21 | 21 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Section Between Moffatt Street and Park Street
Route Macalister Street
Link Locality:

URBAN MIDBLOCK

Macalister Street - Between Moffatt Street and Park Street

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 80 | 81 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Heavy vehicle factor $H_V=1/(1+P_t*(E_t-1))$ | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 739 | 753 | 768 | 784 | 799 | 815 | 832 | 848 | 865 | 883 | 900 | 918 | 937 | 955 | 975 | 994 | 1014 | 1034 | 1055 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Design Hour Volume (ADT x 30th Highest Factor) | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 83 | 85 | 86 | 88 | 90 | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 80 | 81 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Average Annual Daily Traffic (AADT) | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 739 | 753 | 768 | 784 | 799 | 815 | 832 | 848 | 865 | 883 | 900 | 918 | 937 | 955 | 975 | 994 | 1014 | 1034 | 1055 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 83 | 85 | 86 | 88 | 90 | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 |
| Development Traffic (veh/h) | | | 0 | 120 | 120 | 120 | 120 | 120 | 120 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 83 | 85 | 86 | 268 | 270 | 272 | 273 | 275 | 277 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 |

Section Between Moffatt Street and Park Street
Route Macalister Street
Link Locality:

URBAN MIDBLOCK

Macalister Street - Between Moffatt Street and Park Street

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 104 | 107 | 109 | 111 | 113 | 115 | 118 | 120 | 122 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 |
| Total vehicles (veh/h) | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 138 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Heavy vehicle factor $H_V=1/(1+P_t*(E_t-1))$ | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 823 | 839 | 856 | 873 | 890 | 908 | 926 | 945 | 964 | 983 | 1003 | 1023 | 1043 | 1064 | 1085 | 1107 | 1129 | 1152 | 1175 | 1198 | 1222 | 1247 | 1272 | 1297 | 1323 | 1349 | 1376 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 138 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 126 | 129 | 132 | 134 | 137 | 140 | 142 | 145 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 104 | 107 | 109 | 111 | 113 | 115 | 118 | 120 | 122 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 |
| Total vehicles (veh/h) | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 138 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Average Annual Daily Traffic (AADT) | 823 | 839 | 856 | 873 | 890 | 908 | 926 | 945 | 964 | 983 | 1003 | 1023 | 1043 | 1064 | 1085 | 1107 | 1129 | 1152 | 1175 | 1198 | 1222 | 1247 | 1272 | 1297 | 1323 | 1349 | 1376 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 126 | 129 | 132 | 134 | 137 | 140 | 142 | 145 |
| Development Traffic (veh/h) | | | 0 | 120 | 120 | 120 | 120 | 120 | 120 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 87 | 89 | 90 | 272 | 274 | 276 | 278 | 280 | 282 | 104 | 106 | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 126 | 129 | 132 | 134 | 137 | 140 | 142 | 145 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |

Section: Between Macalister Street and Warwick Road
Route: Park Street
Link Locality:

URBAN MIDBLOCK

Park Street - Between Macalister Street and Warwick Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| Total vehicles (veh/h) | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 428 | 436 | 445 | 454 | 463 | 472 | 482 | 491 | 501 | 511 | 521 | 532 | 543 | 553 | 564 | 576 | 587 | 599 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| Total vehicles (veh/h) | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 428 | 436 | 445 | 454 | 463 | 472 | 482 | 491 | 501 | 511 | 521 | 532 | 543 | 553 | 564 | 576 | 587 | 599 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 |
| Development Traffic (veh/h) | | | 0 | 120 | 120 | 120 | 120 | 120 | 120 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - With Development | 46 | 47 | 48 | 229 | 230 | 231 | 232 | 233 | 234 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.03 | 0.03 | 0.03 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 |

Section: Between Macalister Street and Warwick Road
Route: Park Street
Link Locality:

URBAN MIDBLOCK

Park Street - Between Macalister Street and Warwick Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| Total vehicles (veh/h) | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 428 | 436 | 445 | 454 | 463 | 472 | 482 | 491 | 501 | 511 | 521 | 532 | 543 | 553 | 564 | 576 | 587 | 599 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 61 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 |
| Total vehicles (veh/h) | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 358 | 365 | 372 | 380 | 387 | 395 | 403 | 411 | 419 | 428 | 436 | 445 | 454 | 463 | 472 | 482 | 491 | 501 | 511 | 521 | 532 | 543 | 553 | 564 | 576 | 587 | 599 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 |
| Development Traffic (veh/h) | | | 0 | 120 | 120 | 120 | 120 | 120 | 120 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - With Development | 46 | 47 | 48 | 229 | 230 | 231 | 232 | 233 | 234 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.03 | 0.03 | 0.03 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 |

Section: Between Strongs Rd and Rosewood Warrill View Rd
Route: Reillys Road
Link Locality:

URBAN MIDBLOCK

Reillys Road - Between Strongs Rd and Rosewood Warrill View Rd

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 1 | 2 | 3 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 3 | 3 | 3 | 4 | 4 | 7 | 8 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section: Between Strongs Rd and Rosewood Warrill View Rd
Route: Reillys Road
Link Locality:

URBAN MIDBLOCK

Reillys Road - Between Strongs Rd and Rosewood Warrill View Rd

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Development Traffic (veh/h) | | | 0 | 0 | 1 | 1 | 2 | 3 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 3 | 3 | 3 | 4 | 4 | 7 | 8 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section: Between Old Grandchester Road and Coveney Road
Route: Strongs Road
Link Locality:

URBAN MIDBLOCK

Strongs Road - Between Old Grandchester Road and Coveney Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Development Traffic (veh/h) | | | 0 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 3 | 3 | 21 | 21 | 21 | 21 | 21 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section: Between Old Grandchester Road and Coveney Road
Route: Strongs Road
Link Locality:

URBAN MIDBLOCK

Strongs Road - Between Old Grandchester Road and Coveney Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total vehicles (veh/h) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Development Traffic (veh/h) | | | 0 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 3 | 3 | 3 | 21 | 21 | 21 | 21 | 21 | 22 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Section: Between Mount Lindsay Highway and Tina Street
Route: Eaglesfield Street
Link Locality:

URBAN MIDBLOCK

Eaglesfield Street - Between Mount Lindsay Highway and Tina Street

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Total vehicles (veh/h) | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 160 | 164 | 167 | 170 | 174 | 177 | 181 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 900 | 918 | 936 | 955 | 974 | 994 | 1014 | 1034 | 1054 | 1076 | 1097 | 1119 | 1141 | 1164 | 1188 | 1211 | 1236 | 1260 | 1285 | 1311 | 1337 | 1364 | 1391 | 1419 | 1448 | 1477 | 1506 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 160 | 164 | 167 | 170 | 174 | 177 | 181 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 | 173 | 176 | 179 | 183 | 187 | 190 | 194 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 |

Two Lane Highway Link Analysis: (Northbound)

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Total vehicles (veh/h) | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 160 | 164 | 167 | 170 | 174 | 177 | 181 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 900 | 918 | 936 | 955 | 974 | 994 | 1014 | 1034 | 1054 | 1076 | 1097 | 1119 | 1141 | 1164 | 1188 | 1211 | 1236 | 1260 | 1285 | 1311 | 1337 | 1364 | 1391 | 1419 | 1448 | 1477 | 1506 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 | 173 | 176 | 179 | 183 | 187 | 190 | 194 |
| Development Traffic (veh/h) | | | 0 | 68 | 68 | 68 | 68 | 68 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - With Development | 116 | 118 | 121 | 225 | 228 | 230 | 233 | 235 | 238 | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 | 173 | 176 | 179 | 183 | 187 | 190 | 194 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.08 | 0.08 | 0.09 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 |

Section: Between Mount Lindsay Highway and Tina Street
Route: Eaglesfield Street
Link Locality:

URBAN MIDBLOCK

Eaglesfield Street - Between Mount Lindsay Highway and Tina Street

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Total vehicles (veh/h) | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 160 | 164 | 167 | 170 | 174 | 177 | 181 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 900 | 918 | 936 | 955 | 974 | 994 | 1014 | 1034 | 1054 | 1076 | 1097 | 1119 | 1141 | 1164 | 1188 | 1211 | 1236 | 1260 | 1285 | 1311 | 1337 | 1364 | 1391 | 1419 | 1448 | 1477 | 1506 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 160 | 164 | 167 | 170 | 174 | 177 | 181 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 | 173 | 176 | 179 | 183 | 187 | 190 | 194 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 |

Two Lane Highway Link Analysis: (Southbound)

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 92 | 94 | 96 | 97 | 99 | 101 | 103 | 105 | 108 | 110 | 112 | 114 | 116 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | 142 | 145 | 148 | 151 | 154 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Total vehicles (veh/h) | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 | 140 | 143 | 145 | 148 | 151 | 154 | 157 | 160 | 164 | 167 | 170 | 174 | 177 | 181 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 900 | 918 | 936 | 955 | 974 | 994 | 1014 | 1034 | 1054 | 1076 | 1097 | 1119 | 1141 | 1164 | 1188 | 1211 | 1236 | 1260 | 1285 | 1311 | 1337 | 1364 | 1391 | 1419 | 1448 | 1477 | 1506 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - Base Without Development | 116 | 118 | 121 | 123 | 126 | 128 | 131 | 133 | 136 | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 | 173 | 176 | 179 | 183 | 187 | 190 | 194 |
| Development Traffic (veh/h) | | | 0 | 68 | 68 | 68 | 68 | 68 | 68 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=L/V+(HV/fHV) - With Development | 116 | 118 | 121 | 225 | 228 | 230 | 233 | 235 | 238 | 139 | 142 | 144 | 147 | 150 | 153 | 156 | 159 | 163 | 166 | 169 | 173 | 176 | 179 | 183 | 187 | 190 | 194 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.08 | 0.08 | 0.09 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 |

Section: Between Craig Street and Gwydir Highway
Route: Bent Street
Link Locality:

URBAN MIDBLOCK, 1 lane

Bent Street - Between Craig Street and Gwydir Highway

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 253 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

Section: Between Craig Street and Gwydir Highway
Route: Bent Street
Link Locality:

URBAN MIDBLOCK

Bent Street - Between Craig Street and Gwydir Highway

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 253 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

| | |
|---|---|
| Section | Between Bent Street and Pacific Highway |
| Route | Charles Street |
| Link Locality: | |

URBAN MIDBLOCK

Charles Street - Between Bent Street and Pacific Highway

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHv=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 253 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

| | |
|---|---|
| Section | Between Bent Street and Pacific Highway |
| Route | Charles Street |
| Link Locality: | |

URBAN MIDBLOCK

Charles Street - Between Bent Street and Pacific Highway

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHv=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 273 | 279 | 284 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 230 | 234 | 239 | 244 | 249 | 254 | 259 | 264 | 269 | 275 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 335 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 247 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 215 | 219 | 224 | 228 | 233 | 237 | 242 | 253 | 252 | 257 | 262 | 267 | 273 | 278 | 284 | 289 | 295 | 301 | 307 | 313 | 319 | 326 | 332 | 339 | 346 | 353 | 360 |
| LoS Result | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B |
| Volume to Capacity Ratio (V/C) | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 |

Section Full Extent
Route Clark Road
Link Locality:

URBAN MIDBLOCK

Clark Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fhv=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

Two Lane Highway Link Analysis: (Northbound)

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 80 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

Section Full Extent
Route Clark Road
Link Locality:

URBAN MIDBLOCK

Clark Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

Two Lane Highway Link Analysis: (Southbound)

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 80 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

Section: Between Villiers Street and Bent Street
Route: Craig Street
Link Locality:

URBAN MIDBLOCK

Craig Street - Between Villiers Street and Bent Street

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 569 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.41 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Section: Between Villiers Street and Bent Street
Route: Craig Street
Link Locality:

URBAN MIDBLOCK

Craig Street - Between Villiers Street and Bent Street

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 569 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.41 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

| | |
|---|---|
| Section | Between Villers Street and Summerland Way |
| Route | Dobie Street |
| Link Locality: | |

URBAN MIDBLOCK

Dobie Street - Between Villers Street and Summerland Way

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 569 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.41 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

| | |
|---|---|
| Section | Between Villers Street and Summerland Way |
| Route | Dobie Street |
| Link Locality: | |

URBAN MIDBLOCK

Dobie Street - Between Villers Street and Summerland Way

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 569 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.41 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Section: Between Summerland Way and Trenayr Road
Route: Red Lane
Link Locality:

URBAN MIDBLOCK

Red Lane - Between Summerland Way and Trenayr Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 76 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

Section: Between Summerland Way and Trenayr Road
Route: Red Lane
Link Locality:

URBAN MIDBLOCK

Red Lane - Between Summerland Way and Trenayr Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| Total vehicles (veh/h) | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 97 | 98 | 100 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 400 | 408 | 416 | 424 | 433 | 442 | 450 | 459 | 469 | 478 | 488 | 497 | 507 | 517 | 528 | 538 | 549 | 560 | 571 | 583 | 594 | 606 | 618 | 631 | 643 | 656 | 669 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 65 | 66 | 67 | 68 | 70 | 71 | 73 | 76 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |

| | |
|---|---|
| Section | Between Summerland Way and Clark Road |
| Route | Trenayr Road |
| Link Locality: | |

URBAN MIDBLOCK

Trenayr Road - Between Summerland Way and Clark Road

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 376 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

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|---|---|
| Section | Between Summerland Way and Clark Road |
| Route | Trenayr Road |
| Link Locality: | |

URBAN MIDBLOCK

Trenayr Road - Between Summerland Way and Clark Road

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 376 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

| | |
|---|---|
| Section | Between Clark Road and Red Lane |
| Route | Trenayr Road |
| Link Locality: | |

URBAN MIDBLOCK

Trenayr Road - Between Clark Road and Red Lane

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 373 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

| | |
|---|---|
| Section | Between Clark Road and Red Lane |
| Route | Trenayr Road |
| Link Locality: | |

URBAN MIDBLOCK

Trenayr Road - Between Clark Road and Red Lane

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 255 | 260 | 265 | 271 | 276 | 282 | 287 | 293 | 299 | 305 | 311 | 317 | 323 | 330 | 336 | 343 | 350 | 357 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 418 | 427 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 61 | 62 | 63 | 64 | 66 | 67 | 68 | 70 | 71 | 72 | 74 | 75 |
| Total vehicles (veh/h) | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 351 | 359 | 366 | 373 | 380 | 388 | 396 | 404 | 412 | 420 | 428 | 437 | 446 | 455 | 464 | 473 | 483 | 492 | 502 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 2000 | 2040 | 2081 | 2122 | 2165 | 2208 | 2252 | 2297 | 2343 | 2390 | 2438 | 2487 | 2536 | 2587 | 2639 | 2692 | 2746 | 2800 | 2856 | 2914 | 2972 | 3031 | 3092 | 3154 | 3217 | 3281 | 3347 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 370 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| Development Traffic (veh/h) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 323 | 329 | 336 | 342 | 349 | 356 | 363 | 373 | 378 | 385 | 393 | 401 | 409 | 417 | 426 | 434 | 443 | 452 | 461 | 470 | 479 | 489 | 499 | 509 | 519 | 529 | 540 |
| LoS Result | B | B | B | B | B | B | B | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Volume to Capacity Ratio (V/C) | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.32 | 0.33 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 |

| | |
|---|---|
| Section | Between Craig Street and Dobie Street |
| Route | Villers Street |
| Link Locality: | |

URBAN MIDBLOCK

Villers Street - Between Craig Street and Dobie Street

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 569 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.41 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

| | |
|---|---|
| Section | Between Craig Street and Dobie Street |
| Route | Villers Street |
| Link Locality: | |

URBAN MIDBLOCK

Villers Street - Between Craig Street and Dobie Street

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 388 | 395 | 403 | 411 | 420 | 428 | 437 | 445 | 454 | 463 | 472 | 482 | 492 | 501 | 511 | 522 | 532 | 543 | 554 | 565 | 576 | 587 | 599 | 611 | 623 | 636 | 649 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 68 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 |
| Total vehicles (veh/h) | 456 | 465 | 474 | 484 | 494 | 503 | 514 | 524 | 534 | 545 | 556 | 567 | 578 | 590 | 602 | 614 | 626 | 639 | 651 | 664 | 678 | 691 | 705 | 719 | 733 | 748 | 763 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Average Annual Daily Traffic (AADT) | 3800 | 3876 | 3954 | 4033 | 4113 | 4196 | 4279 | 4365 | 4452 | 4541 | 4632 | 4725 | 4819 | 4916 | 5014 | 5114 | 5217 | 5321 | 5427 | 5536 | 5647 | 5760 | 5875 | 5992 | 6112 | 6234 | 6359 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 563 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 0 | 4 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 490 | 500 | 510 | 520 | 531 | 541 | 552 | 569 | 574 | 586 | 598 | 610 | 622 | 634 | 647 | 660 | 673 | 686 | 700 | 714 | 728 | 743 | 758 | 773 | 788 | 804 | 820 |
| LoS Result | C | C | C | C | C | C | C | C | C | C | C | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D |
| Volume to Capacity Ratio (V/C) | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.41 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 |

Section Full Extent
Route Fairbank Place
Link Locality:

URBAN MIDBLOCK

Fairbank Place - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 |
| Total vehicles (veh/h) | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 167 | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 |
| Total vehicles (veh/h) | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 145 | 148 | 151 | 154 | 157 | 160 | 163 | 167 | 170 | 173 | 177 | 180 | 184 | 188 | 191 | 195 | 199 | 203 | 207 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 243 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 25 | 26 | 26 | 27 | 28 | 29 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 42 | 42 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

Section Full Extent
Route Fairbank Place
Link Locality:

URBAN MIDBLOCK

Fairbank Place - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 24 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Total vehicles (veh/h) | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 | 152 | 155 | 158 | 161 | 164 | 168 | 171 | 174 | 178 | 181 | 185 | 189 | 192 | 196 | 200 | 204 | 208 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 24 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 |
| Total vehicles (veh/h) | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Average Annual Daily Traffic (AADT) | 125 | 127 | 130 | 132 | 135 | 137 | 140 | 143 | 146 | 149 | 152 | 155 | 158 | 161 | 164 | 168 | 171 | 174 | 178 | 181 | 185 | 189 | 192 | 196 | 200 | 204 | 208 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 21 | 21 | 22 | 22 | 23 | 24 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 |

| | |
|---|---|
| Section | Between Moffatt Street and Park Street |
| Route | Macalister Street |
| Link Locality: | |

URBAN MIDBLOCK

Macalister Street - Between Moffatt Street and Park Street — Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 80 | 81 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 739 | 753 | 768 | 784 | 799 | 815 | 832 | 848 | 865 | 883 | 900 | 918 | 937 | 955 | 975 | 994 | 1014 | 1034 | 1055 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Design Hour Volume (ADT x 30th Highest Factor) | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 83 | 85 | 86 | 88 | 90 | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 80 | 81 | 83 | 85 | 86 | 88 | 90 | 92 | 94 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| Total vehicles (veh/h) | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 119 | 122 | 124 | 127 | 129 | 132 | 134 | 137 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 739 | 753 | 768 | 784 | 799 | 815 | 832 | 848 | 865 | 883 | 900 | 918 | 937 | 955 | 975 | 994 | 1014 | 1034 | 1055 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 83 | 85 | 86 | 88 | 90 | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 |
| Development Traffic (veh/h) | | | 0 | 120 | 120 | 120 | 120 | 120 | 120 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 83 | 85 | 86 | 268 | 270 | 272 | 273 | 275 | 277 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 |

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| Section | Between Moffatt Street and Park Street |
| Route | Macalister Street |
| Link Locality: | |

URBAN MIDBLOCK

Macalister Street - Between Moffatt Street and Park Street — Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 104 | 107 | 109 | 111 | 113 | 115 | 118 | 120 | 122 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 |
| Total vehicles (veh/h) | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 138 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 823 | 839 | 856 | 873 | 890 | 908 | 926 | 945 | 964 | 983 | 1003 | 1023 | 1043 | 1064 | 1085 | 1107 | 1129 | 1152 | 1175 | 1198 | 1222 | 1247 | 1272 | 1297 | 1323 | 1349 | 1376 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 138 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 126 | 129 | 132 | 134 | 137 | 140 | 142 | 145 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 73 | 75 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 104 | 107 | 109 | 111 | 113 | 115 | 118 | 120 | 122 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 |
| Total vehicles (veh/h) | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 117 | 120 | 122 | 125 | 127 | 130 | 132 | 135 | 138 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Average Annual Daily Traffic (AADT) | 823 | 839 | 856 | 873 | 890 | 908 | 926 | 945 | 964 | 983 | 1003 | 1023 | 1043 | 1064 | 1085 | 1107 | 1129 | 1152 | 1175 | 1198 | 1222 | 1247 | 1272 | 1297 | 1323 | 1349 | 1376 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 87 | 89 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 126 | 129 | 132 | 134 | 137 | 140 | 142 | 145 |
| Development Traffic (veh/h) | | | | 180 | 182 | 184 | 186 | 188 | 190 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 87 | 89 | 90 | 272 | 274 | 276 | 278 | 280 | 282 | 104 | 106 | 108 | 110 | 112 | 115 | 117 | 119 | 122 | 124 | 126 | 129 | 132 | 134 | 137 | 140 | 142 | 145 |
| LoS Result | A | A | A | B | B | B | B | B | B | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |

Section Full Extent
Route Newhill Drive
Link Locality:

URBAN MIDBLOCK

Newhill Drive - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 81 | 83 | 85 | 86 | 88 | 90 | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 594 | 606 | 618 | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 739 | 753 | 769 | 784 | 800 | 816 | 832 | 849 | 866 | 883 | 900 | 918 | 937 | 956 | 975 | 994 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Design Hour Volume (ADT x 30th Highest Factor) | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 81 | 83 | 85 | 86 | 88 | 90 | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 132 | 134 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 |

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 59 | 60 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| Total vehicles (veh/h) | 65 | 67 | 68 | 69 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 81 | 83 | 85 | 86 | 88 | 90 | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |
| Average Annual Daily Traffic (AADT) | 594 | 606 | 618 | 630 | 643 | 656 | 669 | 682 | 696 | 710 | 724 | 739 | 753 | 769 | 784 | 800 | 816 | 832 | 849 | 866 | 883 | 900 | 918 | 937 | 956 | 975 | 994 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 80 | 82 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 132 | 134 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 80 | 82 | 83 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 132 | 134 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 |

Section Full Extent
Route Newhill Drive
Link Locality:

URBAN MIDBLOCK

Newhill Drive - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 83 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 |
| Total vehicles (veh/h) | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 118 | 120 | 122 | 125 | 127 | 130 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 646 | 659 | 672 | 686 | 699 | 713 | 728 | 742 | 757 | 772 | 788 | 803 | 819 | 836 | 852 | 870 | 887 | 905 | 923 | 941 | 960 | 979 | 999 | 1019 | 1039 | 1060 | 1081 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 118 | 120 | 122 | 125 | 127 | 130 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 | 142 | 145 | 147 | 150 | 153 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 |

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 | 83 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 44 | 45 | 45 | 46 | 47 |
| Total vehicles (veh/h) | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 115 | 118 | 120 | 122 | 125 | 127 | 130 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 |
| Average Annual Daily Traffic (AADT) | 646 | 659 | 672 | 686 | 699 | 713 | 728 | 742 | 757 | 772 | 788 | 803 | 819 | 836 | 852 | 870 | 887 | 905 | 923 | 941 | 960 | 979 | 999 | 1019 | 1039 | 1060 | 1081 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 92 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 | 142 | 145 | 147 | 150 | 153 |
| Development Traffic (veh/h) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 92 | 93 | 95 | 97 | 100 | 102 | 104 | 105 | 107 | 110 | 112 | 114 | 116 | 119 | 121 | 123 | 126 | 128 | 131 | 134 | 136 | 139 | 142 | 145 | 147 | 150 | 153 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 |

Section Full Extent
Route Noblevale Way
Link Locality:

URBAN MIDBLOCK

Noblevale Way - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 24 | 25 | 25 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 |
| Total vehicles (veh/h) | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 219 | 223 | 227 | 232 | 237 | 241 | 246 | 251 | 256 | 261 | 267 | 272 | 277 | 283 | 288 | 294 | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 352 | 359 | 366 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Design Hour Volume (ADT x 30th Highest Factor) | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 24 | 25 | 25 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 |
| Total vehicles (veh/h) | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| Average Annual Daily Traffic (AADT) | 219 | 223 | 227 | 232 | 237 | 241 | 246 | 251 | 256 | 261 | 267 | 272 | 277 | 283 | 288 | 294 | 300 | 306 | 312 | 318 | 325 | 331 | 338 | 345 | 352 | 359 | 366 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 33 | 34 | 35 | 35 | 36 | 38 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |

Section Full Extent
Route Noblevale Way
Link Locality:

URBAN MIDBLOCK

Noblevale Way - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Heavy vehicle factor fHV=1/(1+Pt*(Et-1)) | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 225 | 229 | 234 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Design Hour Volume (ADT x 30th Highest Factor) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 23 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 |
| Total vehicles (veh/h) | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 |
| Passenger car equivalent (Et) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Average Annual Daily Traffic (AADT) | 225 | 229 | 234 | 238 | 243 | 248 | 253 | 258 | 263 | 268 | 274 | 279 | 285 | 290 | 296 | 302 | 308 | 314 | 321 | 327 | 334 | 340 | 347 | 354 | 361 | 368 | 376 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 27 | 27 | 28 | 28 | 29 | 30 | 31 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 45 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

Section Full Extent
Route Rob Roy Way
Link Locality:

URBAN MIDBLOCK

Rob Roy Way - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 |
| Total vehicles (veh/h) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 422 | 430 | 439 | 447 | 456 | 465 | 475 | 484 | 494 | 504 | 514 | 524 | 535 | 545 | 556 | 567 | 579 | 590 | 602 | 614 | 626 | 639 | 652 | 665 | 678 | 692 | 705 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Design Hour Volume (ADT x 30th Highest Factor) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 56 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 67 | 69 | 70 | 72 | 73 | 74 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 34 |
| Total vehicles (veh/h) | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 422 | 430 | 439 | 447 | 456 | 465 | 475 | 484 | 494 | 504 | 514 | 524 | 535 | 545 | 556 | 567 | 579 | 590 | 602 | 614 | 626 | 639 | 652 | 665 | 678 | 692 | 705 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 56 | 58 | 59 | 60 | 61 | 62 | 64 | 65 | 66 | 67 | 69 | 70 | 72 | 73 | 74 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 56 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 67 | 69 | 70 | 72 | 73 | 74 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | 93 | 94 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 |

Section Full Extent
Route Rob Roy Way
Link Locality:

URBAN MIDBLOCK

Rob Roy Way - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 |
| Total vehicles (veh/h) | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Heavy vehicle factor fHV=1/(1+Pt*(E1-1)) | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 403 | 411 | 419 | 428 | 436 | 445 | 454 | 463 | 472 | 482 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Design Hour Volume (ADT x 30th Highest Factor) | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 57 | 58 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 30 |
| Total vehicles (veh/h) | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 56 | 57 | 58 | 59 | 60 | 61 | 63 | 64 | 65 | 66 | 68 | 69 | 70 | 72 | 73 | 75 | 76 | 78 | 79 | 81 |
| Passenger car equivalent (E) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Average Annual Daily Traffic (AADT) | 403 | 411 | 419 | 428 | 436 | 445 | 454 | 463 | 472 | 482 | 491 | 501 | 511 | 521 | 532 | 542 | 553 | 564 | 575 | 587 | 599 | 611 | 623 | 635 | 648 | 661 | 674 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 57 | 58 | 60 | 61 | 62 | 63 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 57 | 58 | 60 | 61 | 62 | 64 | 65 | 66 | 67 | 69 | 70 | 71 | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 |

Section Full Extent
Route T Morrows Road
Link Locality:

URBAN MIDBLOCK

T Morrows Road - Full Extent

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Northbound)**

Northbound - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Average Annual Daily Traffic (AADT) | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 | 114 | 117 | 119 | 121 | 124 | 126 | 129 | 131 | 134 | 137 | 139 | 142 | 145 | 148 | 151 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 5 | 5 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 19 | 19 | 19 | 20 | 20 | 21 | 28 | 28 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Section Full Extent
Route T Morrows Road
Link Locality:

URBAN MIDBLOCK

T Morrows Road - Full Extent

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions Without Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Heavy vehicle factor fHV=1/(1+Pt*(Ei-1)) | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 |
| Driver population (fp) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average Annual Daily Traffic (AADT) | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 | 116 | 118 | 120 | 123 | 125 | 128 | 130 | 133 | 135 | 138 | 141 | 144 | 147 | 150 | 153 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Design Hour Volume (ADT x 30th Highest Factor) | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

**Two Lane Highway Link Analysis: (Southbound)**

Southbound Direction - Two Lane Highway level Terrain Link Analysis: Base Conditions With Development Traffic

| Year of Analysis | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ultimate Link Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Light Vehicle Volume (veh/h) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Terrain Type (L = Level, R = Rolling, M = Mountainous) | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| LoS A Ultimate Capacity (pc/h/ln) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| LoS B Ultimate Capacity (pc/h/ln) | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| LoS C Ultimate Capacity (pc/h/ln) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| LoS D Ultimate Capacity (pc/h/ln) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| LoS E Ultimate Capacity (pc/h/ln) | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| Number of lanes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of trucks (veh/h) | 10 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 |
| Total vehicles (veh/h) | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 |
| Passenger car equivalent (Ei) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Percentage Trucks (Pt) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Average Annual Daily Traffic (AADT) | 91 | 93 | 95 | 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 | 113 | 116 | 118 | 120 | 123 | 125 | 128 | 130 | 133 | 135 | 138 | 141 | 144 | 147 | 150 | 153 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| K-value (30th Highest / AADT) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - Base Without Development | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 |
| Development Traffic (veh/h) | | | 0 | 0 | 0 | 0 | 5 | 5 | 0 | | | | | | | | | | | | | | | | | | |
| Passenger Car Equivalent Design Flow Vp=LV+(HV/fHV) - With Development | 19 | 19 | 20 | 20 | 20 | 21 | 28 | 29 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 30 | 31 | 32 |
| LoS Result | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| Volume to Capacity Ratio (V/C) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

# APPENDIX

# U

# Traffic Impact Assessment Technical Report

## Appendix O Detailed Pavement Impact Analysis

**CALVERT TO KAGARU** ENVIRONMENTAL IMPACT STATEMENT

IR_1381

## Beaudesert Boonah Road - Between Ipswich Boonah Road and Wyaralong Dam Access

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Beaudesert Boonah Road | | | Between Ipswich Boonah Road and Wyaralong Dam Access | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 153797 | 112584 | 266381 | | | 266381 | |
| 2019 | 156873 | 114835 | 271708 | | | 271708 | |
| 2020 | 160011 | 117132 | 277142 | | | 277142 | |
| 2021 | 163211 | 119475 | 282685 | | | 282685 | |
| 2022 | 166475 | 121864 | 288339 | 0 | 0 | 288339 | 0.00% |
| 2023 | 169804 | 124301 | 294106 | 162755 | 162755 | 619615 | 110.68% |
| 2024 | 173201 | 126787 | 299988 | 36809 | 36809 | 373605 | 24.54% |
| 2025 | 176665 | 129323 | 305988 | 0 | 0 | 305988 | 0.00% |
| 2026 | 180198 | 131910 | 312107 | 0 | 0 | 312107 | 0.00% |
| 2027 | 183802 | 134548 | 318350 | | | 318350 | |
| 2028 | 187478 | 137239 | 324717 | | | 324717 | |
| 2029 | 191227 | 139983 | 331211 | | | 331211 | |
| 2030 | 195052 | 142783 | 337835 | | | 337835 | |
| 2031 | 198953 | 145639 | 344592 | | | 344592 | |
| 2032 | 202932 | 148552 | 351484 | | | 351484 | |
| 2033 | 206991 | 151523 | 358513 | | | 358513 | |
| 2034 | 211131 | 154553 | 365684 | | | 365684 | |
| 2035 | 215353 | 157644 | 372997 | | | 372997 | |
| 2036 | 219660 | 160797 | 380457 | | | 380457 | |
| 2037 | 224053 | 164013 | 388066 | | | 388066 | |
| 2038 | 228534 | 167293 | 395828 | | | 395828 | |
| 2039 | 233105 | 170639 | 403744 | | | 403744 | |

## Beaudesert Boonah Road - Between Wyaralong Dam Access and Tilley Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Beaudesert Boonah Road | | | Between Wyaralong Dam Access and Tilley Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | 5% Comparison |
| 2018 | 153797 | 112584 | 266381 | | | 266381 | |
| 2019 | 156873 | 114835 | 271708 | | | 271708 | |
| 2020 | 160011 | 117132 | 277142 | | | 277142 | |
| 2021 | 163211 | 119475 | 282685 | | | 282685 | |
| 2022 | 166475 | 121864 | 288339 | 3795 | 3795 | 295930 | 2.63% |
| 2023 | 169804 | 124301 | 294106 | 181934 | 181934 | 657973 | 123.72% |
| 2024 | 173201 | 126787 | 299988 | 56787 | 56787 | 413563 | 37.86% |
| 2025 | 176665 | 129323 | 305988 | 11654 | 11654 | 329296 | 7.62% |
| 2026 | 180198 | 131910 | 312107 | 0 | 0 | 312107 | 0.00% |
| 2027 | 183802 | 134548 | 318350 | | | 318350 | |
| 2028 | 187478 | 137239 | 324717 | | | 324717 | |
| 2029 | 191227 | 139983 | 331211 | | | 331211 | |
| 2030 | 195052 | 142783 | 337835 | | | 337835 | |
| 2031 | 198953 | 145639 | 344592 | | | 344592 | |
| 2032 | 202932 | 148552 | 351484 | | | 351484 | |
| 2033 | 206991 | 151523 | 358513 | | | 358513 | |
| 2034 | 211131 | 154553 | 365684 | | | 365684 | |
| 2035 | 215353 | 157644 | 372997 | | | 372997 | |
| 2036 | 219660 | 160797 | 380457 | | | 380457 | |
| 2037 | 224053 | 164013 | 388066 | | | 388066 | |
| 2038 | 228534 | 167293 | 395828 | | | 395828 | |
| 2039 | 233105 | 170639 | 403744 | | | 403744 | |

## Beaudesert Boonah Road - Between Tilley Road and Sandy Creek Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| Beaudesert Boonah Road | | | | Between Tilley Road and Sandy Creek Road | | | |
|---|---|---|---|---|---|---|---|
| Base SAR's | | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 152305 | 110038 | 262343 | | | 262343 | |
| 2019 | 155351 | 112239 | 267590 | | | 267590 | |
| 2020 | 158458 | 114484 | 272942 | | | 272942 | |
| 2021 | 161627 | 116773 | 278400 | | | 278400 | |
| 2022 | 164860 | 119109 | 283968 | 3795 | 3795 | 291559 | 2.67% |
| 2023 | 168157 | 121491 | 289648 | 181934 | 181934 | 653516 | 125.62% |
| 2024 | 171520 | 123921 | 295441 | 56787 | 56787 | 409015 | 38.44% |
| 2025 | 174950 | 126399 | 301350 | 11654 | 11654 | 324658 | 7.73% |
| 2026 | 178449 | 128927 | 307377 | 0 | 0 | 307377 | 0.00% |
| 2027 | 182018 | 131506 | 313524 | | | 313524 | |
| 2028 | 185659 | 134136 | 319795 | | | 319795 | |
| 2029 | 189372 | 136819 | 326191 | | | 326191 | |
| 2030 | 193159 | 139555 | 332714 | | | 332714 | |
| 2031 | 197023 | 142346 | 339369 | | | 339369 | |
| 2032 | 200963 | 145193 | 346156 | | | 346156 | |
| 2033 | 204982 | 148097 | 353079 | | | 353079 | |
| 2034 | 209082 | 151059 | 360141 | | | 360141 | |
| 2035 | 213264 | 154080 | 367344 | | | 367344 | |
| 2036 | 217529 | 157162 | 374690 | | | 374690 | |
| 2037 | 221879 | 160305 | 382184 | | | 382184 | |
| 2038 | 226317 | 163511 | 389828 | | | 389828 | |
| 2039 | 230843 | 166781 | 397624 | | | 397624 | |

## Beaudesert Boonah Road - Between Sandy Creek Road and Bromelton House Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Beaudesert Boonah Road | | | Between Sandy Creek Road and Bromelton House Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | 5% Comparison |
| 2018 | 153797 | 112584 | 266381 | | | 266381 | |
| 2019 | 156873 | 114835 | 271708 | | | 271708 | |
| 2020 | 160011 | 117132 | 277142 | | | 277142 | |
| 2021 | 163211 | 119475 | 282685 | | | 282685 | |
| 2022 | 166475 | 121864 | 288339 | 3795 | 3795 | 295930 | 2.63% |
| 2023 | 169804 | 124301 | 294106 | 181934 | 181934 | 657973 | 123.72% |
| 2024 | 173201 | 126787 | 299988 | 58714 | 58714 | 417415 | 39.14% |
| 2025 | 176665 | 129323 | 305988 | 19347 | 19347 | 344681 | 12.65% |
| 2026 | 180198 | 131910 | 312107 | 0 | 0 | 312107 | 0.00% |
| 2027 | 183802 | 134548 | 318350 | | | 318350 | |
| 2028 | 187478 | 137239 | 324717 | | | 324717 | |
| 2029 | 191227 | 139983 | 331211 | | | 331211 | |
| 2030 | 195052 | 142783 | 337835 | | | 337835 | |
| 2031 | 198953 | 145639 | 344592 | | | 344592 | |
| 2032 | 202932 | 148552 | 351484 | | | 351484 | |
| 2033 | 206991 | 151523 | 358513 | | | 358513 | |
| 2034 | 211131 | 154553 | 365684 | | | 365684 | |
| 2035 | 215353 | 157644 | 372997 | | | 372997 | |
| 2036 | 219660 | 160797 | 380457 | | | 380457 | |
| 2037 | 224053 | 164013 | 388066 | | | 388066 | |
| 2038 | 228534 | 167293 | 395828 | | | 395828 | |
| 2039 | 233105 | 170639 | 403744 | | | 403744 | |

## Beaudesert Boonah Road - Between Bromelton House Road and Ilbogan Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Beaudesert Boonah Road | | | Between Bromelton House Road and Ilbogan Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 153797 | 112584 | 266381 | | | 266381 | |
| 2019 | 156873 | 114835 | 271708 | | | 271708 | |
| 2020 | 160011 | 117132 | 277142 | | | 277142 | |
| 2021 | 163211 | 119475 | 282685 | | | 282685 | |
| 2022 | 166475 | 121864 | 288339 | 0 | 0 | 288339 | 0.00% |
| 2023 | 169804 | 124301 | 294106 | 0 | 0 | 294106 | 0.00% |
| 2024 | 173201 | 126787 | 299988 | 5248 | 5248 | 310483 | 3.50% |
| 2025 | 176665 | 129323 | 305988 | 10565 | 10565 | 327118 | 6.91% |
| 2026 | 180198 | 131910 | 312107 | 0 | 0 | 312107 | 0.00% |
| 2027 | 183802 | 134548 | 318350 | | | 318350 | |
| 2028 | 187478 | 137239 | 324717 | | | 324717 | |
| 2029 | 191227 | 139983 | 331211 | | | 331211 | |
| 2030 | 195052 | 142783 | 337835 | | | 337835 | |
| 2031 | 198953 | 145639 | 344592 | | | 344592 | |
| 2032 | 202932 | 148552 | 351484 | | | 351484 | |
| 2033 | 206991 | 151523 | 358513 | | | 358513 | |
| 2034 | 211131 | 154553 | 365684 | | | 365684 | |
| 2035 | 215353 | 157644 | 372997 | | | 372997 | |
| 2036 | 219660 | 160797 | 380457 | | | 380457 | |
| 2037 | 224053 | 164013 | 388066 | | | 388066 | |
| 2038 | 228534 | 167293 | 395828 | | | 395828 | |
| 2039 | 233105 | 170639 | 403744 | | | 403744 | |

## Cunningham Highway - Between Ipswich Motorway and Redbank Plains Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Cunningham Highway | | | Between Ipswich Motorway and Redbank Plains Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 2780076 | 3187521 | 5967597 | | | 5967597 | |
| 2019 | 2835677 | 3251271 | 6086949 | | | 6086949 | |
| 2020 | 2892391 | 3316297 | 6208688 | | | 6208688 | |
| 2021 | 2950239 | 3382623 | 6332861 | | | 6332861 | |
| 2022 | 3009243 | 3450275 | 6459519 | 0 | 0 | 6459519 | 0.00% |
| 2023 | 3069428 | 3519281 | 6588709 | 0 | 0 | 6588709 | 0.00% |
| 2024 | 3130817 | 3589666 | 6720483 | 0 | 0 | 6720483 | 0.00% |
| 2025 | 3193433 | 3661460 | 6854893 | 6267 | 6267 | 6867427 | 0.18% |
| 2026 | 3257302 | 3734689 | 6991991 | 0 | 0 | 6991991 | 0.00% |
| 2027 | 3322448 | 3809383 | 7131830 | | | 7131830 | |
| 2028 | 3388897 | 3885570 | 7274467 | | | 7274467 | |
| 2029 | 3456675 | 3963282 | 7419956 | | | 7419956 | |
| 2030 | 3525808 | 4042547 | 7568356 | | | 7568356 | |
| 2031 | 3596324 | 4123398 | 7719723 | | | 7719723 | |
| 2032 | 3668251 | 4205866 | 7874117 | | | 7874117 | |
| 2033 | 3741616 | 4289983 | 8031599 | | | 8031599 | |
| 2034 | 3816448 | 4375783 | 8192231 | | | 8192231 | |
| 2035 | 3892777 | 4463299 | 8356076 | | | 8356076 | |
| 2036 | 3970633 | 4552565 | 8523198 | | | 8523198 | |
| 2037 | 4050045 | 4643616 | 8693662 | | | 8693662 | |
| 2038 | 4131046 | 4736488 | 8867535 | | | 8867535 | |
| 2039 | 4213667 | 4831218 | 9044885 | | | 9044885 | |

## Cunningham Highway - Between Redbanks Plains Road and Ripley Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Cunningham Highway | | | Between Redbanks Plains Road and Ripley Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 2418324 | 1986965 | 4405289 | | | 4405289 | |
| 2019 | 2466691 | 2026704 | 4493395 | | | 4493395 | |
| 2020 | 2516024 | 2067238 | 4583263 | | | 4583263 | |
| 2021 | 2566345 | 2108583 | 4674928 | | | 4674928 | |
| 2022 | 2617672 | 2150755 | 4768427 | 3476 | 3476 | 4775379 | 0.15% |
| 2023 | 2670025 | 2193770 | 4863795 | 14914 | 14914 | 4893624 | 0.61% |
| 2024 | 2723426 | 2237645 | 4961071 | 5041 | 5041 | 4971154 | 0.20% |
| 2025 | 2777894 | 2282398 | 5060293 | 7832 | 7832 | 5075957 | 0.31% |
| 2026 | 2833452 | 2328046 | 5161498 | 0 | 0 | 5161498 | 0.00% |
| 2027 | 2890121 | 2374607 | 5264728 | | | 5264728 | |
| 2028 | 2947924 | 2422099 | 5370023 | | | 5370023 | |
| 2029 | 3006882 | 2470541 | 5477423 | | | 5477423 | |
| 2030 | 3067020 | 2519952 | 5586972 | | | 5586972 | |
| 2031 | 3128360 | 2570351 | 5698711 | | | 5698711 | |
| 2032 | 3190927 | 2621758 | 5812685 | | | 5812685 | |
| 2033 | 3254746 | 2674193 | 5928939 | | | 5928939 | |
| 2034 | 3319841 | 2727677 | 6047518 | | | 6047518 | |
| 2035 | 3386237 | 2782231 | 6168468 | | | 6168468 | |
| 2036 | 3453962 | 2837875 | 6291838 | | | 6291838 | |
| 2037 | 3523041 | 2894633 | 6417674 | | | 6417674 | |
| 2038 | 3593502 | 2952526 | 6546028 | | | 6546028 | |
| 2039 | 3665372 | 3011576 | 6676948 | | | 6676948 | |

## Cunningham Highway - Between Ripley Road and Ipswich Boonah Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Cunningham Highway | | | Between Ripley Road and Ipswich Boonah Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 1698805 | 1342961 | 3041765 | | | 3041765 | |
| 2019 | 1732781 | 1369820 | 3102601 | | | 3102601 | |
| 2020 | 1767437 | 1397216 | 3164653 | | | 3164653 | |
| 2021 | 1802785 | 1425160 | 3227946 | | | 3227946 | |
| 2022 | 1838841 | 1453664 | 3292505 | 7516 | 7516 | 3307537 | 0.46% |
| 2023 | 1875618 | 1482737 | 3358355 | 26389 | 26389 | 3411132 | 1.57% |
| 2024 | 1913130 | 1512392 | 3425522 | 13848 | 13848 | 3453219 | 0.81% |
| 2025 | 1951393 | 1542640 | 3494032 | 12799 | 12799 | 3519631 | 0.73% |
| 2026 | 1990421 | 1573492 | 3563913 | 0 | 0 | 3563913 | 0.00% |
| 2027 | 2030229 | 1604962 | 3635191 | | | 3635191 | |
| 2028 | 2070834 | 1637061 | 3707895 | | | 3707895 | |
| 2029 | 2112250 | 1669803 | 3782053 | | | 3782053 | |
| 2030 | 2154495 | 1703199 | 3857694 | | | 3857694 | |
| 2031 | 2197585 | 1737263 | 3934848 | | | 3934848 | |
| 2032 | 2241537 | 1772008 | 4013545 | | | 4013545 | |
| 2033 | 2286368 | 1807448 | 4093816 | | | 4093816 | |
| 2034 | 2332095 | 1843597 | 4175692 | | | 4175692 | |
| 2035 | 2378737 | 1880469 | 4259206 | | | 4259206 | |
| 2036 | 2426312 | 1918078 | 4344390 | | | 4344390 | |
| 2037 | 2474838 | 1956440 | 4431278 | | | 4431278 | |
| 2038 | 2524335 | 1995569 | 4519903 | | | 4519903 | |
| 2039 | 2574821 | 2035480 | 4610302 | | | 4610302 | |

## Cunningham Highway - Between Ipswich Boonah Road and Middle Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Cunningham Highway | | | Between Ipswich Boonah Road and Middle Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 1113103 | 1229707 | 2342809 | | | 2342809 | |
| 2019 | 1135365 | 1254301 | 2389666 | | | 2389666 | |
| 2020 | 1158072 | 1279387 | 2437459 | | | 2437459 | |
| 2021 | 1181233 | 1304975 | 2486208 | | | 2486208 | |
| 2022 | 1204858 | 1331074 | 2535932 | 93452 | 93452 | 2722836 | 7.37% |
| 2023 | 1228955 | 1357696 | 2586651 | 260772 | 260772 | 3108195 | 20.16% |
| 2024 | 1253534 | 1384850 | 2638384 | 52711 | 52711 | 2743805 | 4.00% |
| 2025 | 1278605 | 1412547 | 2691152 | 28419 | 28419 | 2747991 | 2.11% |
| 2026 | 1304177 | 1440798 | 2744975 | 0 | 0 | 2744975 | 0.00% |
| 2027 | 1330261 | 1469614 | 2799874 | | | 2799874 | |
| 2028 | 1356866 | 1499006 | 2855872 | | | 2855872 | |
| 2029 | 1384003 | 1528986 | 2912989 | | | 2912989 | |
| 2030 | 1411683 | 1559566 | 2971249 | | | 2971249 | |
| 2031 | 1439917 | 1590757 | 3030674 | | | 3030674 | |
| 2032 | 1468715 | 1622572 | 3091287 | | | 3091287 | |
| 2033 | 1498089 | 1655024 | 3153113 | | | 3153113 | |
| 2034 | 1528051 | 1688124 | 3216175 | | | 3216175 | |
| 2035 | 1558612 | 1721887 | 3280499 | | | 3280499 | |
| 2036 | 1589785 | 1756324 | 3346109 | | | 3346109 | |
| 2037 | 1621580 | 1791451 | 3413031 | | | 3413031 | |
| 2038 | 1654012 | 1827280 | 3481292 | | | 3481292 | |
| 2039 | 1687092 | 1863825 | 3550917 | | | 3550917 | |

## Cunningham Highway - Between Middle Road and Ipswich Rosewood Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Cunningham Highway | | | Between Middle Road and Ipswich Rosewood Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 1113103 | 1229707 | 2342809 | | | 2342809 | |
| 2019 | 1135365 | 1254301 | 2389666 | | | 2389666 | |
| 2020 | 1158072 | 1279387 | 2437459 | | | 2437459 | |
| 2021 | 1181233 | 1304975 | 2486208 | | | 2486208 | |
| 2022 | 1204858 | 1331074 | 2535932 | 93452 | 93452 | 2722836 | 7.37% |
| 2023 | 1228955 | 1357696 | 2586651 | 358548 | 358548 | 3303747 | 27.72% |
| 2024 | 1253534 | 1384850 | 2638384 | 43758 | 43758 | 2725901 | 3.32% |
| 2025 | 1278605 | 1412547 | 2691152 | 26265 | 26265 | 2743682 | 1.95% |
| 2026 | 1304177 | 1440798 | 2744975 | 0 | 0 | 2744975 | 0.00% |
| 2027 | 1330261 | 1469614 | 2799874 | | | 2799874 | |
| 2028 | 1356866 | 1499006 | 2855872 | | | 2855872 | |
| 2029 | 1384003 | 1528986 | 2912989 | | | 2912989 | |
| 2030 | 1411683 | 1559566 | 2971249 | | | 2971249 | |
| 2031 | 1439917 | 1590757 | 3030674 | | | 3030674 | |
| 2032 | 1468715 | 1622572 | 3091287 | | | 3091287 | |
| 2033 | 1498089 | 1655024 | 3153113 | | | 3153113 | |
| 2034 | 1528051 | 1688124 | 3216175 | | | 3216175 | |
| 2035 | 1558612 | 1721887 | 3280499 | | | 3280499 | |
| 2036 | 1589785 | 1756324 | 3346109 | | | 3346109 | |
| 2037 | 1621580 | 1791451 | 3413031 | | | 3413031 | |
| 2038 | 1654012 | 1827280 | 3481292 | | | 3481292 | |
| 2039 | 1687092 | 1863825 | 3550917 | | | 3550917 | |

## Cunningham Highway - Between Ipswich Rosewood Road and Champions Way

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Cunningham Highway | | | Between Ipswich Rosewood Road and Champions Way | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 668465 | 776022 | 1444487 | | | 1444487 | |
| 2019 | 681834 | 791543 | 1473377 | | | 1473377 | |
| 2020 | 695471 | 807373 | 1502844 | | | 1502844 | |
| 2021 | 709380 | 823521 | 1532901 | | | 1532901 | |
| 2022 | 723568 | 839991 | 1563559 | 16104 | 16104 | 1595767 | 2.06% |
| 2023 | 738039 | 856791 | 1594830 | 20682 | 20682 | 1636194 | 2.59% |
| 2024 | 752800 | 873927 | 1626727 | 16147 | 16147 | 1659021 | 1.99% |
| 2025 | 767856 | 891405 | 1659261 | 30663 | 30663 | 1720588 | 3.70% |
| 2026 | 783213 | 909234 | 1692446 | 0 | 0 | 1692446 | 0.00% |
| 2027 | 798877 | 927418 | 1726295 | | | 1726295 | |
| 2028 | 814855 | 945967 | 1760821 | | | 1760821 | |
| 2029 | 831152 | 964886 | 1796038 | | | 1796038 | |
| 2030 | 847775 | 984184 | 1831958 | | | 1831958 | |
| 2031 | 864730 | 1003867 | 1868598 | | | 1868598 | |
| 2032 | 882025 | 1023945 | 1905970 | | | 1905970 | |
| 2033 | 899665 | 1044424 | 1944089 | | | 1944089 | |
| 2034 | 917659 | 1065312 | 1982971 | | | 1982971 | |
| 2035 | 936012 | 1086618 | 2022630 | | | 2022630 | |
| 2036 | 954732 | 1108351 | 2063083 | | | 2063083 | |
| 2037 | 973827 | 1130518 | 2104344 | | | 2104344 | |
| 2038 | 993303 | 1153128 | 2146431 | | | 2146431 | |
| 2039 | 1013169 | 1176191 | 2189360 | | | 2189360 | |

## Cunningham Highway - Between Champions Way and Mutdapilly Churchbank Weir Rd

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Cunningham Highway | | | Between Champions Way and Mutdapilly Churchbank Weir Rd | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | 5% Comparison |
| 2018 | 419477 | 425958 | 845435 | | | 845435 | |
| 2019 | 427866 | 434478 | 862344 | | | 862344 | |
| 2020 | 436424 | 443167 | 879591 | | | 879591 | |
| 2021 | 445152 | 452031 | 897183 | | | 897183 | |
| 2022 | 454055 | 461071 | 915126 | 28596 | 28596 | 972318 | 6.25% |
| 2023 | 463136 | 470293 | 933429 | 34518 | 34518 | 1002464 | 7.40% |
| 2024 | 472399 | 479698 | 952097 | 34518 | 34518 | 1021133 | 7.25% |
| 2025 | 481847 | 489292 | 971139 | 20135 | 20135 | 1011410 | 4.15% |
| 2026 | 491484 | 499078 | 990562 | 0 | 0 | 990562 | 0.00% |
| 2027 | 501314 | 509060 | 1010373 | | | 1010373 | |
| 2028 | 511340 | 519241 | 1030581 | | | 1030581 | |
| 2029 | 521567 | 529626 | 1051192 | | | 1051192 | |
| 2030 | 531998 | 540218 | 1072216 | | | 1072216 | |
| 2031 | 542638 | 551023 | 1093661 | | | 1093661 | |
| 2032 | 553491 | 562043 | 1115534 | | | 1115534 | |
| 2033 | 564560 | 573284 | 1137844 | | | 1137844 | |
| 2034 | 575852 | 584750 | 1160601 | | | 1160601 | |
| 2035 | 587369 | 596445 | 1183813 | | | 1183813 | |
| 2036 | 599116 | 608374 | 1207490 | | | 1207490 | |
| 2037 | 611098 | 620541 | 1231639 | | | 1231639 | |
| 2038 | 623320 | 632952 | 1256272 | | | 1256272 | |
| 2039 | 635787 | 645611 | 1281398 | | | 1281398 | |

## Haigslea Amberley Road - Between Karrabin Rosewood Rd and Warrego Highway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Haigslea Amberley Road | | | Between Karrabin Rosewood Rd and Warrego Highway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 283804 | 304914 | 588718 | | | 588718 | |
| 2019 | 289480 | 311012 | 600492 | | | 600492 | |
| 2020 | 295270 | 317232 | 612502 | | | 612502 | |
| 2021 | 301175 | 323577 | 624752 | | | 624752 | |
| 2022 | 307199 | 330048 | 637247 | 0 | 0 | 637247 | 0.00% |
| 2023 | 313343 | 336649 | 649992 | 0 | 0 | 649992 | 0.00% |
| 2024 | 319610 | 343382 | 662992 | 0 | 0 | 662992 | 0.00% |
| 2025 | 326002 | 350250 | 676252 | 1409 | 1409 | 679069 | 0.42% |
| 2026 | 332522 | 357255 | 689777 | 0 | 0 | 689777 | 0.00% |
| 2027 | 339172 | 364400 | 703572 | | | 703572 | |
| 2028 | 345956 | 371688 | 717644 | | | 717644 | |
| 2029 | 352875 | 379122 | 731997 | | | 731997 | |
| 2030 | 359932 | 386704 | 746637 | | | 746637 | |
| 2031 | 367131 | 394438 | 761569 | | | 761569 | |
| 2032 | 374474 | 402327 | 776801 | | | 776801 | |
| 2033 | 381963 | 410374 | 792337 | | | 792337 | |
| 2034 | 389602 | 418581 | 808184 | | | 808184 | |
| 2035 | 397395 | 426953 | 824347 | | | 824347 | |
| 2036 | 405342 | 435492 | 840834 | | | 840834 | |
| 2037 | 413449 | 444202 | 857651 | | | 857651 | |
| 2038 | 421718 | 453086 | 874804 | | | 874804 | |
| 2039 | 430153 | 462147 | 892300 | | | 892300 | |

## Ipswich Boonah Road - Between Cunningham Highway and Mt Flinders Rd

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Ipswich Boonah Road | | | Between Cunningham Highway and Mt Flinders Rd | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 280454 | 296872 | 577326 | | | 577326 | |
| 2019 | 286063 | 302809 | 588872 | | | 588872 | |
| 2020 | 291784 | 308866 | 600650 | | | 600650 | |
| 2021 | 297620 | 315043 | 612663 | | | 612663 | |
| 2022 | 303572 | 321344 | 624916 | 87502 | 87502 | 799919 | 28.00% |
| 2023 | 309643 | 327771 | 637414 | 250740 | 250740 | 1138895 | 78.67% |
| 2024 | 315836 | 334326 | 650162 | 59665 | 59665 | 769493 | 18.35% |
| 2025 | 322153 | 341013 | 663166 | 42250 | 42250 | 747666 | 12.74% |
| 2026 | 328596 | 347833 | 676429 | 0 | 0 | 676429 | 0.00% |
| 2027 | 335168 | 354790 | 689958 | | | 689958 | |
| 2028 | 341871 | 361885 | 703757 | | | 703757 | |
| 2029 | 348709 | 369123 | 717832 | | | 717832 | |
| 2030 | 355683 | 376506 | 732188 | | | 732188 | |
| 2031 | 362797 | 384036 | 746832 | | | 746832 | |
| 2032 | 370053 | 391716 | 761769 | | | 761769 | |
| 2033 | 377454 | 399551 | 777004 | | | 777004 | |
| 2034 | 385003 | 407542 | 792544 | | | 792544 | |
| 2035 | 392703 | 415692 | 808395 | | | 808395 | |
| 2036 | 400557 | 424006 | 824563 | | | 824563 | |
| 2037 | 408568 | 432486 | 841054 | | | 841054 | |
| 2038 | 416739 | 441136 | 857875 | | | 857875 | |
| 2039 | 425074 | 449959 | 875033 | | | 875033 | |

## Ipswich Boonah Road - Between Mt Flinders Rd and Warrill View Peak Crossing Rd

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| Ipswich Boonah Road | | | | Between Mt Flinders Rd and Warrill View Peak Crossing Rd | | | |
|---|---|---|---|---|---|---|---|
| Base SAR's | | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 280454 | 296872 | 577326 | | | 577326 | |
| 2019 | 286063 | 302809 | 588872 | | | 588872 | |
| 2020 | 291784 | 308866 | 600650 | | | 600650 | |
| 2021 | 297620 | 315043 | 612663 | | | 612663 | |
| 2022 | 303572 | 321344 | 624916 | 94431 | 94431 | 813779 | 30.22% |
| 2023 | 309643 | 327771 | 637414 | 257288 | 257288 | 1151991 | 80.73% |
| 2024 | 315836 | 334326 | 650162 | 55083 | 55083 | 760329 | 16.94% |
| 2025 | 322153 | 341013 | 663166 | 17904 | 17904 | 698975 | 5.40% |
| 2026 | 328596 | 347833 | 676429 | 0 | 0 | 676429 | 0.00% |
| 2027 | 335168 | 354790 | 689958 | | | 689958 | |
| 2028 | 341871 | 361885 | 703757 | | | 703757 | |
| 2029 | 348709 | 369123 | 717832 | | | 717832 | |
| 2030 | 355683 | 376506 | 732188 | | | 732188 | |
| 2031 | 362797 | 384036 | 746832 | | | 746832 | |
| 2032 | 370053 | 391716 | 761769 | | | 761769 | |
| 2033 | 377454 | 399551 | 777004 | | | 777004 | |
| 2034 | 385003 | 407542 | 792544 | | | 792544 | |
| 2035 | 392703 | 415692 | 808395 | | | 808395 | |
| 2036 | 400557 | 424006 | 824563 | | | 824563 | |
| 2037 | 408568 | 432486 | 841054 | | | 841054 | |
| 2038 | 416739 | 441136 | 857875 | | | 857875 | |
| 2039 | 425074 | 449959 | 875033 | | | 875033 | |

## Ipswich Boonah Road - Between Warrill View Peak Crossing Road and Dwyers Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Ipswich Boonah Road | | | Between Warrill View Peak Crossing Road and Dwyers Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 153797 | 110038 | 263835 | | | 263835 | |
| 2019 | 156873 | 112239 | 269112 | | | 269112 | |
| 2020 | 160011 | 114484 | 274494 | | | 274494 | |
| 2021 | 163211 | 116773 | 279984 | | | 279984 | |
| 2022 | 166475 | 119109 | 285584 | 91516 | 91516 | 468617 | 64.09% |
| 2023 | 169804 | 121491 | 291295 | 265698 | 265698 | 822691 | 182.42% |
| 2024 | 173201 | 123921 | 297121 | 63493 | 63493 | 424107 | 42.74% |
| 2025 | 176665 | 126399 | 303064 | 21227 | 21227 | 345519 | 14.01% |
| 2026 | 180198 | 128927 | 309125 | 0 | 0 | 309125 | 0.00% |
| 2027 | 183802 | 131506 | 315308 | | | 315308 | |
| 2028 | 187478 | 134136 | 321614 | | | 321614 | |
| 2029 | 191227 | 136819 | 328046 | | | 328046 | |
| 2030 | 195052 | 139555 | 334607 | | | 334607 | |
| 2031 | 198953 | 142346 | 341299 | | | 341299 | |
| 2032 | 202932 | 145193 | 348125 | | | 348125 | |
| 2033 | 206991 | 148097 | 355088 | | | 355088 | |
| 2034 | 211131 | 151059 | 362189 | | | 362189 | |
| 2035 | 215353 | 154080 | 369433 | | | 369433 | |
| 2036 | 219660 | 157162 | 376822 | | | 376822 | |
| 2037 | 224053 | 160305 | 384358 | | | 384358 | |
| 2038 | 228534 | 163511 | 392045 | | | 392045 | |
| 2039 | 233105 | 166781 | 399886 | | | 399886 | |

## Ipswich Boonah Road - Between Dwyers Road and Washpool Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Ipswich Boonah Road | | | Between Dwyers Road and Washpool Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 153797 | 110038 | 263835 | | | 263835 | |
| 2019 | 156873 | 112239 | 269112 | | | 269112 | |
| 2020 | 160011 | 114484 | 274494 | | | 274494 | |
| 2021 | 163211 | 116773 | 279984 | | | 279984 | |
| 2022 | 166475 | 119109 | 285584 | 91516 | 91516 | 468617 | 64.09% |
| 2023 | 169804 | 121491 | 291295 | 263095 | 263095 | 817485 | 180.64% |
| 2024 | 173201 | 123921 | 297121 | 62842 | 62842 | 422806 | 42.30% |
| 2025 | 176665 | 126399 | 303064 | 20333 | 20333 | 343730 | 13.42% |
| 2026 | 180198 | 128927 | 309125 | 0 | 0 | 309125 | 0.00% |
| 2027 | 183802 | 131506 | 315308 | | | 315308 | |
| 2028 | 187478 | 134136 | 321614 | | | 321614 | |
| 2029 | 191227 | 136819 | 328046 | | | 328046 | |
| 2030 | 195052 | 139555 | 334607 | | | 334607 | |
| 2031 | 198953 | 142346 | 341299 | | | 341299 | |
| 2032 | 202932 | 145193 | 348125 | | | 348125 | |
| 2033 | 206991 | 148097 | 355088 | | | 355088 | |
| 2034 | 211131 | 151059 | 362189 | | | 362189 | |
| 2035 | 215353 | 154080 | 369433 | | | 369433 | |
| 2036 | 219660 | 157162 | 376822 | | | 376822 | |
| 2037 | 224053 | 160305 | 384358 | | | 384358 | |
| 2038 | 228534 | 163511 | 392045 | | | 392045 | |
| 2039 | 233105 | 166781 | 399886 | | | 399886 | |

## Ipswich Boonah Road - Between Washpool Road and Beaudesert Boonah Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Ipswich Boonah Road | | | Between Washpool Road and Beaudesert Boonah Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 153797 | 110038 | 263835 | | | 263835 | |
| 2019 | 156873 | 112239 | 269112 | | | 269112 | |
| 2020 | 160011 | 114484 | 274494 | | | 274494 | |
| 2021 | 163211 | 116773 | 279984 | | | 279984 | |
| 2022 | 166475 | 119109 | 285584 | 0 | 0 | 285584 | 0.00% |
| 2023 | 169804 | 121491 | 291295 | 162755 | 162755 | 616805 | 111.75% |
| 2024 | 173201 | 123921 | 297121 | 36809 | 36809 | 370739 | 24.78% |
| 2025 | 176665 | 126399 | 303064 | 0 | 0 | 303064 | 0.00% |
| 2026 | 180198 | 128927 | 309125 | 0 | 0 | 309125 | 0.00% |
| 2027 | 183802 | 131506 | 315308 | | | 315308 | |
| 2028 | 187478 | 134136 | 321614 | | | 321614 | |
| 2029 | 191227 | 136819 | 328046 | | | 328046 | |
| 2030 | 195052 | 139555 | 334607 | | | 334607 | |
| 2031 | 198953 | 142346 | 341299 | | | 341299 | |
| 2032 | 202932 | 145193 | 348125 | | | 348125 | |
| 2033 | 206991 | 148097 | 355088 | | | 355088 | |
| 2034 | 211131 | 151059 | 362189 | | | 362189 | |
| 2035 | 215353 | 154080 | 369433 | | | 369433 | |
| 2036 | 219660 | 157162 | 376822 | | | 376822 | |
| 2037 | 224053 | 160305 | 384358 | | | 384358 | |
| 2038 | 228534 | 163511 | 392045 | | | 392045 | |
| 2039 | 233105 | 166781 | 399886 | | | 399886 | |

## Ipswich Motorway - Between Cunningham Highway and Logan Motorway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Ipswich Motorway | | | Between Cunningham Highway and Logan Motorway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 1613161 | 2504648 | 4117809 | | | 4117809 | |
| 2019 | 1645424 | 2554741 | 4200165 | | | 4200165 | |
| 2020 | 1678333 | 2605836 | 4284169 | | | 4284169 | |
| 2021 | 1711899 | 2657953 | 4369852 | | | 4369852 | |
| 2022 | 1746137 | 2711112 | 4457249 | 0 | 0 | 4457249 | 0.00% |
| 2023 | 1781060 | 2765334 | 4546394 | 0 | 0 | 4546394 | 0.00% |
| 2024 | 1816681 | 2820641 | 4637322 | 0 | 0 | 4637322 | 0.00% |
| 2025 | 1853015 | 2877054 | 4730068 | 7676 | 7676 | 4745420 | 0.32% |
| 2026 | 1890075 | 2934595 | 4824670 | 0 | 0 | 4824670 | 0.00% |
| 2027 | 1927877 | 2993287 | 4921163 | | | 4921163 | |
| 2028 | 1966434 | 3053152 | 5019587 | | | 5019587 | |
| 2029 | 2005763 | 3114215 | 5119978 | | | 5119978 | |
| 2030 | 2045878 | 3176500 | 5222378 | | | 5222378 | |
| 2031 | 2086796 | 3240030 | 5326825 | | | 5326825 | |
| 2032 | 2128532 | 3304830 | 5433362 | | | 5433362 | |
| 2033 | 2171102 | 3370927 | 5542029 | | | 5542029 | |
| 2034 | 2214524 | 3438345 | 5652870 | | | 5652870 | |
| 2035 | 2258815 | 3507112 | 5765927 | | | 5765927 | |
| 2036 | 2303991 | 3577254 | 5881246 | | | 5881246 | |
| 2037 | 2350071 | 3648800 | 5998871 | | | 5998871 | |
| 2038 | 2397072 | 3721776 | 6118848 | | | 6118848 | |
| 2039 | 2445014 | 3796211 | 6241225 | | | 6241225 | |

## Ipswich Rosewood Road - Between Cunningham Highway and Ipswich Rosewood Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| Ipswich Rosewood Road | | | | Between Cunningham Highway and Ipswich Rosewood Road | | | |
|---|---|---|---|---|---|---|---|
| Base SAR's | | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 422521 | 487625 | 910146 | | | 910146 | |
| 2019 | 430971 | 497378 | 928349 | | | 928349 | |
| 2020 | 439591 | 507325 | 946916 | | | 946916 | |
| 2021 | 448383 | 517472 | 965855 | | | 965855 | |
| 2022 | 457350 | 527821 | 985172 | 185232 | 185232 | 1355635 | 37.60% |
| 2023 | 466497 | 538378 | 1004875 | 564787 | 564787 | 2134449 | 112.41% |
| 2024 | 475827 | 549145 | 1024973 | 37865 | 37865 | 1100702 | 7.39% |
| 2025 | 485344 | 560128 | 1045472 | 1583 | 1583 | 1048637 | 0.30% |
| 2026 | 495051 | 571331 | 1066381 | 0 | 0 | 1066381 | 0.00% |
| 2027 | 504952 | 582757 | 1087709 | | | 1087709 | |
| 2028 | 515051 | 594413 | 1109463 | | | 1109463 | |
| 2029 | 525352 | 606301 | 1131652 | | | 1131652 | |
| 2030 | 535859 | 618427 | 1154286 | | | 1154286 | |
| 2031 | 546576 | 630795 | 1177371 | | | 1177371 | |
| 2032 | 557507 | 643411 | 1200919 | | | 1200919 | |
| 2033 | 568658 | 656280 | 1224937 | | | 1224937 | |
| 2034 | 580031 | 669405 | 1249436 | | | 1249436 | |
| 2035 | 591631 | 682793 | 1274425 | | | 1274425 | |
| 2036 | 603464 | 696449 | 1299913 | | | 1299913 | |
| 2037 | 615533 | 710378 | 1325911 | | | 1325911 | |
| 2038 | 627844 | 724586 | 1352429 | | | 1352429 | |
| 2039 | 640401 | 739077 | 1379478 | | | 1379478 | |

## Ipswich Rosewood Road - Between Ipswich Rosewood Road and Karrabin Rosewood Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Ipswich Rosewood Road | | | Between Ipswich Rosewood Road and Karrabin Rosewood Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 129454 | 171883 | 301337 | | | 301337 | |
| 2019 | 132043 | 175320 | 307363 | | | 307363 | |
| 2020 | 134684 | 178827 | 313511 | | | 313511 | |
| 2021 | 137377 | 182403 | 319781 | | | 319781 | |
| 2022 | 140125 | 186051 | 326176 | 34 | 34 | 326245 | 0.02% |
| 2023 | 142927 | 189773 | 332700 | 920 | 920 | 334540 | 0.55% |
| 2024 | 145786 | 193568 | 339354 | 7548 | 7548 | 354451 | 4.45% |
| 2025 | 148702 | 197439 | 346141 | 12438 | 12438 | 371016 | 7.19% |
| 2026 | 151676 | 201388 | 353064 | 0 | 0 | 353064 | 0.00% |
| 2027 | 154709 | 205416 | 360125 | | | 360125 | |
| 2028 | 157803 | 209524 | 367328 | | | 367328 | |
| 2029 | 160959 | 213715 | 374674 | | | 374674 | |
| 2030 | 164179 | 217989 | 382168 | | | 382168 | |
| 2031 | 167462 | 222349 | 389811 | | | 389811 | |
| 2032 | 170812 | 226796 | 397607 | | | 397607 | |
| 2033 | 174228 | 231332 | 405559 | | | 405559 | |
| 2034 | 177712 | 235958 | 413671 | | | 413671 | |
| 2035 | 181267 | 240677 | 421944 | | | 421944 | |
| 2036 | 184892 | 245491 | 430383 | | | 430383 | |
| 2037 | 188590 | 250401 | 438990 | | | 438990 | |
| 2038 | 192361 | 255409 | 447770 | | | 447770 | |
| 2039 | 196209 | 260517 | 456726 | | | 456726 | |

## Karrabin Rosewood Road - Between Rosewood Laidley Rd and Haigslea Amberley Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Karrabin Rosewood Road | | | Between Rosewood Laidley Rd and Haigslea Amberley Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 160682 | 110514 | 271197 | | | 271197 | |
| 2019 | 163896 | 112725 | 276621 | | | 276621 | |
| 2020 | 167174 | 114979 | 282153 | | | 282153 | |
| 2021 | 170517 | 117279 | 287796 | | | 287796 | |
| 2022 | 173928 | 119624 | 293552 | 0 | 0 | 293552 | 0.00% |
| 2023 | 177406 | 122017 | 299423 | 0 | 0 | 299423 | 0.00% |
| 2024 | 180954 | 124457 | 305412 | 3076 | 3076 | 311563 | 2.01% |
| 2025 | 184573 | 126946 | 311520 | 10974 | 10974 | 333468 | 7.05% |
| 2026 | 188265 | 129485 | 317750 | 0 | 0 | 317750 | 0.00% |
| 2027 | 192030 | 132075 | 324105 | | | 324105 | |
| 2028 | 195871 | 134716 | 330587 | | | 330587 | |
| 2029 | 199788 | 137411 | 337199 | | | 337199 | |
| 2030 | 203784 | 140159 | 343943 | | | 343943 | |
| 2031 | 207860 | 142962 | 350822 | | | 350822 | |
| 2032 | 212017 | 145821 | 357838 | | | 357838 | |
| 2033 | 216257 | 148738 | 364995 | | | 364995 | |
| 2034 | 220582 | 151713 | 372295 | | | 372295 | |
| 2035 | 224994 | 154747 | 379741 | | | 379741 | |
| 2036 | 229494 | 157842 | 387336 | | | 387336 | |
| 2037 | 234084 | 160999 | 395082 | | | 395082 | |
| 2038 | 238765 | 164219 | 402984 | | | 402984 | |
| 2039 | 243541 | 167503 | 411044 | | | 411044 | |

## Karrabin Rosewood Road - Between Haigslea Amberley Road and Moffatt Street

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| Karrabin Rosewood Road | | | | Between Haigslea Amberley Road and Moffatt Street | | | |
|---|---|---|---|---|---|---|---|
| Base SAR's | | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 148101 | 113924 | 262025 | | | 262025 | |
| 2019 | 151063 | 116202 | 267265 | | | 267265 | |
| 2020 | 154084 | 118526 | 272611 | | | 272611 | |
| 2021 | 157166 | 120897 | 278063 | | | 278063 | |
| 2022 | 160309 | 123315 | 283624 | 0 | 0 | 283624 | 0.00% |
| 2023 | 163515 | 125781 | 289296 | 0 | 0 | 289296 | 0.00% |
| 2024 | 166786 | 128297 | 295082 | 0 | 0 | 295082 | 0.00% |
| 2025 | 170121 | 130863 | 300984 | 0 | 0 | 300984 | 0.00% |
| 2026 | 173524 | 133480 | 307004 | 0 | 0 | 307004 | 0.00% |
| 2027 | 176994 | 136149 | 313144 | | | 313144 | |
| 2028 | 180534 | 138872 | 319407 | | | 319407 | |
| 2029 | 184145 | 141650 | 325795 | | | 325795 | |
| 2030 | 187828 | 144483 | 332311 | | | 332311 | |
| 2031 | 191584 | 147373 | 338957 | | | 338957 | |
| 2032 | 195416 | 150320 | 345736 | | | 345736 | |
| 2033 | 199324 | 153326 | 352651 | | | 352651 | |
| 2034 | 203311 | 156393 | 359704 | | | 359704 | |
| 2035 | 207377 | 159521 | 366898 | | | 366898 | |
| 2036 | 211525 | 162711 | 374236 | | | 374236 | |
| 2037 | 215755 | 165965 | 381721 | | | 381721 | |
| 2038 | 220070 | 169285 | 389355 | | | 389355 | |
| 2039 | 224472 | 172670 | 397142 | | | 397142 | |

## Logan Motorway - Between Ipswich Motorway and Pacific Motorway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Logan Motorway | | | Between Ipswich Motorway and Pacific Motorway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 1854007 | 2310557 | 4164564 | | | 4164564 | |
| 2019 | 1891087 | 2356768 | 4247856 | | | 4247856 | |
| 2020 | 1928909 | 2403904 | 4332813 | | | 4332813 | |
| 2021 | 1967487 | 2451982 | 4419469 | | | 4419469 | |
| 2022 | 2006837 | 2501021 | 4507858 | 0 | 0 | 4507858 | 0.00% |
| 2023 | 2046974 | 2551042 | 4598016 | 0 | 0 | 4598016 | 0.00% |
| 2024 | 2087913 | 2602063 | 4689976 | 0 | 0 | 4689976 | 0.00% |
| 2025 | 2129672 | 2654104 | 4783775 | 7676 | 7676 | 4799127 | 0.32% |
| 2026 | 2172265 | 2707186 | 4879451 | 0 | 0 | 4879451 | 0.00% |
| 2027 | 2215710 | 2761330 | 4977040 | | | 4977040 | |
| 2028 | 2260025 | 2816556 | 5076581 | | | 5076581 | |
| 2029 | 2305225 | 2872887 | 5178112 | | | 5178112 | |
| 2030 | 2351330 | 2930345 | 5281675 | | | 5281675 | |
| 2031 | 2398356 | 2988952 | 5387308 | | | 5387308 | |
| 2032 | 2446323 | 3048731 | 5495054 | | | 5495054 | |
| 2033 | 2495250 | 3109706 | 5604955 | | | 5604955 | |
| 2034 | 2545155 | 3171900 | 5717054 | | | 5717054 | |
| 2035 | 2596058 | 3235338 | 5831396 | | | 5831396 | |
| 2036 | 2647979 | 3300044 | 5948023 | | | 5948023 | |
| 2037 | 2700939 | 3366045 | 6066984 | | | 6066984 | |
| 2038 | 2754957 | 3433366 | 6188324 | | | 6188324 | |
| 2039 | 2810056 | 3502034 | 6312090 | | | 6312090 | |

## Logan Motorway - Between Ipswich Motorway and Centenary Highway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Logan Motorway | | | Between Ipswich Motorway and Centenary Highway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 1613161 | 2504648 | 4117809 | | | 4117809 | |
| 2019 | 1645424 | 2554741 | 4200165 | | | 4200165 | |
| 2020 | 1678333 | 2605836 | 4284169 | | | 4284169 | |
| 2021 | 1711899 | 2657953 | 4369852 | | | 4369852 | |
| 2022 | 1746137 | 2711112 | 4457249 | 0 | 0 | 4457249 | 0.00% |
| 2023 | 1781060 | 2765334 | 4546394 | 2591 | 2591 | 4551575 | 0.11% |
| 2024 | 1816681 | 2820641 | 4637322 | 801 | 801 | 4638924 | 0.03% |
| 2025 | 1853015 | 2877054 | 4730068 | 576 | 576 | 4731220 | 0.02% |
| 2026 | 1890075 | 2934595 | 4824670 | 0 | 0 | 4824670 | 0.00% |
| 2027 | 1927877 | 2993287 | 4921163 | | | 4921163 | |
| 2028 | 1966434 | 3053152 | 5019587 | | | 5019587 | |
| 2029 | 2005763 | 3114215 | 5119978 | | | 5119978 | |
| 2030 | 2045878 | 3176500 | 5222378 | | | 5222378 | |
| 2031 | 2086796 | 3240030 | 5326825 | | | 5326825 | |
| 2032 | 2128532 | 3304830 | 5433362 | | | 5433362 | |
| 2033 | 2171102 | 3370927 | 5542029 | | | 5542029 | |
| 2034 | 2214524 | 3438345 | 5652870 | | | 5652870 | |
| 2035 | 2258815 | 3507112 | 5765927 | | | 5765927 | |
| 2036 | 2303991 | 3577254 | 5881246 | | | 5881246 | |
| 2037 | 2350071 | 3648800 | 5998871 | | | 5998871 | |
| 2038 | 2397072 | 3721776 | 6118848 | | | 6118848 | |
| 2039 | 2445014 | 3796211 | 6241225 | | | 6241225 | |

## Logan Motorway - Between Centenary Highway and Mount Lindesay Highway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Logan Motorway | | | Between Centenary Highway and Mount Lindesay Highway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | 5% Comparison |
| 2018 | 1613161 | 2504648 | 4117809 | | | 4117809 | |
| 2019 | 1645424 | 2554741 | 4200165 | | | 4200165 | |
| 2020 | 1678333 | 2605836 | 4284169 | | | 4284169 | |
| 2021 | 1711899 | 2657953 | 4369852 | | | 4369852 | |
| 2022 | 1746137 | 2711112 | 4457249 | 0 | 0 | 4457249 | 0.00% |
| 2023 | 1781060 | 2765334 | 4546394 | 2591 | 2591 | 4551575 | 0.11% |
| 2024 | 1816681 | 2820641 | 4637322 | 801 | 801 | 4638924 | 0.03% |
| 2025 | 1853015 | 2877054 | 4730068 | 576 | 576 | 4731220 | 0.02% |
| 2026 | 1890075 | 2934595 | 4824670 | 0 | 0 | 4824670 | 0.00% |
| 2027 | 1927877 | 2993287 | 4921163 | | | 4921163 | |
| 2028 | 1966434 | 3053152 | 5019587 | | | 5019587 | |
| 2029 | 2005763 | 3114215 | 5119978 | | | 5119978 | |
| 2030 | 2045878 | 3176500 | 5222378 | | | 5222378 | |
| 2031 | 2086796 | 3240030 | 5326825 | | | 5326825 | |
| 2032 | 2128532 | 3304830 | 5433362 | | | 5433362 | |
| 2033 | 2171102 | 3370927 | 5542029 | | | 5542029 | |
| 2034 | 2214524 | 3438345 | 5652870 | | | 5652870 | |
| 2035 | 2258815 | 3507112 | 5765927 | | | 5765927 | |
| 2036 | 2303991 | 3577254 | 5881246 | | | 5881246 | |
| 2037 | 2350071 | 3648800 | 5998871 | | | 5998871 | |
| 2038 | 2397072 | 3721776 | 6118848 | | | 6118848 | |
| 2039 | 2445014 | 3796211 | 6241225 | | | 6241225 | |

## Mount Lindesay Highway - Btwn Thiedke Rd and NSW/QLD Border

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Mount Lindesay Highway | | | Btwn Thiedke Rd and NSW/QLD Border | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 191392 | 144743 | 336135 | | | 336135 | |
| 2019 | 195220 | 147638 | 342858 | | | 342858 | |
| 2020 | 199124 | 150591 | 349715 | | | 349715 | |
| 2021 | 203107 | 153603 | 356709 | | | 356709 | |
| 2022 | 207169 | 156675 | 363843 | 0 | 0 | 363843 | 0.00% |
| 2023 | 211312 | 159808 | 371120 | 0 | 0 | 371120 | 0.00% |
| 2024 | 215538 | 163004 | 378543 | 0 | 0 | 378543 | 0.00% |
| 2025 | 219849 | 166264 | 386114 | 2872 | 2872 | 391858 | 1.49% |
| 2026 | 224246 | 169590 | 393836 | 0 | 0 | 393836 | 0.00% |
| 2027 | 228731 | 172981 | 401713 | | | 401713 | |
| 2028 | 233306 | 176441 | 409747 | | | 409747 | |
| 2029 | 237972 | 179970 | 417942 | | | 417942 | |
| 2030 | 242731 | 183569 | 426301 | | | 426301 | |
| 2031 | 247586 | 187241 | 434827 | | | 434827 | |
| 2032 | 252538 | 190985 | 443523 | | | 443523 | |
| 2033 | 257588 | 194805 | 452394 | | | 452394 | |
| 2034 | 262740 | 198701 | 461441 | | | 461441 | |
| 2035 | 267995 | 202675 | 470670 | | | 470670 | |
| 2036 | 273355 | 206729 | 480084 | | | 480084 | |
| 2037 | 278822 | 210863 | 489685 | | | 489685 | |
| 2038 | 284398 | 215081 | 499479 | | | 499479 | |
| 2039 | 290086 | 219382 | 509469 | | | 509469 | |

## Mount Lindesay Highway - Between Logan Motorway and Undullah Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Mount Lindesay Highway | | | Between Logan Motorway and Undullah Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 1127301 | 1642578 | 2769879 | | | 2769879 | |
| 2019 | 1149847 | 1675429 | 2825277 | | | 2825277 | |
| 2020 | 1172844 | 1708938 | 2881782 | | | 2881782 | |
| 2021 | 1196301 | 1743117 | 2939418 | | | 2939418 | |
| 2022 | 1220227 | 1777979 | 2998206 | 0 | 0 | 2998206 | 0.00% |
| 2023 | 1244632 | 1813539 | 3058170 | 2591 | 2591 | 3063352 | 0.17% |
| 2024 | 1269524 | 1849809 | 3119334 | 801 | 801 | 3120936 | 0.05% |
| 2025 | 1294915 | 1886806 | 3181721 | 576 | 576 | 3182872 | 0.04% |
| 2026 | 1320813 | 1924542 | 3245355 | 0 | 0 | 3245355 | 0.00% |
| 2027 | 1347230 | 1963032 | 3310262 | | | 3310262 | |
| 2028 | 1374174 | 2002293 | 3376467 | | | 3376467 | |
| 2029 | 1401658 | 2042339 | 3443997 | | | 3443997 | |
| 2030 | 1429691 | 2083186 | 3512877 | | | 3512877 | |
| 2031 | 1458285 | 2124850 | 3583134 | | | 3583134 | |
| 2032 | 1487450 | 2167346 | 3654797 | | | 3654797 | |
| 2033 | 1517199 | 2210693 | 3727893 | | | 3727893 | |
| 2034 | 1547543 | 2254907 | 3802451 | | | 3802451 | |
| 2035 | 1578494 | 2300005 | 3878500 | | | 3878500 | |
| 2036 | 1610064 | 2346006 | 3956070 | | | 3956070 | |
| 2037 | 1642265 | 2392926 | 4035191 | | | 4035191 | |
| 2038 | 1675111 | 2440784 | 4115895 | | | 4115895 | |
| 2039 | 1708613 | 2489600 | 4198213 | | | 4198213 | |

## Mount Lindesay Highway - Between Undullah Road and Allan Creek Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Mount Lindesay Highway | | | Between Undullah Road and Allan Creek Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 795188 | 413914 | 1209103 | | | 1209103 | |
| 2019 | 811092 | 422193 | 1233285 | | | 1233285 | |
| 2020 | 827314 | 430637 | 1257950 | | | 1257950 | |
| 2021 | 843860 | 439249 | 1283109 | | | 1283109 | |
| 2022 | 860737 | 448034 | 1308772 | 3319 | 3319 | 1315410 | 0.51% |
| 2023 | 877952 | 456995 | 1334947 | 7769 | 7769 | 1350484 | 1.16% |
| 2024 | 895511 | 466135 | 1361646 | 6625 | 6625 | 1374896 | 0.97% |
| 2025 | 913421 | 475458 | 1388879 | 1482 | 1482 | 1391843 | 0.21% |
| 2026 | 931690 | 484967 | 1416656 | 0 | 0 | 1416656 | 0.00% |
| 2027 | 950323 | 494666 | 1444990 | | | 1444990 | |
| 2028 | 969330 | 504559 | 1473889 | | | 1473889 | |
| 2029 | 988716 | 514651 | 1503367 | | | 1503367 | |
| 2030 | 1008491 | 524944 | 1533434 | | | 1533434 | |
| 2031 | 1028661 | 535443 | 1564103 | | | 1564103 | |
| 2032 | 1049234 | 546151 | 1595385 | | | 1595385 | |
| 2033 | 1070219 | 557074 | 1627293 | | | 1627293 | |
| 2034 | 1091623 | 568216 | 1659839 | | | 1659839 | |
| 2035 | 1113455 | 579580 | 1693036 | | | 1693036 | |
| 2036 | 1135724 | 591172 | 1726896 | | | 1726896 | |
| 2037 | 1158439 | 602995 | 1761434 | | | 1761434 | |
| 2038 | 1181608 | 615055 | 1796663 | | | 1796663 | |
| 2039 | 1205240 | 627356 | 1832596 | | | 1832596 | |

## Mount Lindesay Highway - Between Allan Creek Road and Eaglesfield Street

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Mount Lindesay Highway | | | Between Allan Creek Road and Eaglesfield Street | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 811878 | 398594 | 1210472 | | | 1210472 | |
| 2019 | 828116 | 406566 | 1234681 | | | 1234681 | |
| 2020 | 844678 | 414697 | 1259375 | | | 1259375 | |
| 2021 | 861571 | 422991 | 1284562 | | | 1284562 | |
| 2022 | 878803 | 431451 | 1310253 | 3319 | 3319 | 1316892 | 0.51% |
| 2023 | 896379 | 440080 | 1336459 | 7769 | 7769 | 1351996 | 1.16% |
| 2024 | 914306 | 448881 | 1363188 | 6625 | 6625 | 1376438 | 0.97% |
| 2025 | 932593 | 457859 | 1390451 | 1482 | 1482 | 1393416 | 0.21% |
| 2026 | 951244 | 467016 | 1418261 | 0 | 0 | 1418261 | 0.00% |
| 2027 | 970269 | 476356 | 1446626 | | | 1446626 | |
| 2028 | 989675 | 485884 | 1475558 | | | 1475558 | |
| 2029 | 1009468 | 495601 | 1505069 | | | 1505069 | |
| 2030 | 1029658 | 505513 | 1535171 | | | 1535171 | |
| 2031 | 1050251 | 515623 | 1565874 | | | 1565874 | |
| 2032 | 1071256 | 525936 | 1597192 | | | 1597192 | |
| 2033 | 1092681 | 536455 | 1629136 | | | 1629136 | |
| 2034 | 1114534 | 547184 | 1661718 | | | 1661718 | |
| 2035 | 1136825 | 558127 | 1694953 | | | 1694953 | |
| 2036 | 1159562 | 569290 | 1728852 | | | 1728852 | |
| 2037 | 1182753 | 580676 | 1763429 | | | 1763429 | |
| 2038 | 1206408 | 592289 | 1798697 | | | 1798697 | |
| 2039 | 1230536 | 604135 | 1834671 | | | 1834671 | |

## Pacific Motorway - Between Logan Highway and NSW/QLD Border

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Pacific Motorway | | | Between Logan Highway and NSW/QLD Border | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directic | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 2472376 | 1807163 | 4279539 | | | 4279539 | |
| 2019 | 2521824 | 1843306 | 4365130 | | | 4365130 | |
| 2020 | 2572260 | 1880173 | 4452433 | | | 4452433 | |
| 2021 | 2623705 | 1917776 | 4541481 | | | 4541481 | |
| 2022 | 2676179 | 1956132 | 4632311 | 0 | 0 | 4632311 | 0.00% |
| 2023 | 2729703 | 1995254 | 4724957 | 0 | 0 | 4724957 | 0.00% |
| 2024 | 2784297 | 2035159 | 4819456 | 0 | 0 | 4819456 | 0.00% |
| 2025 | 2839983 | 2075862 | 4915846 | 7676 | 7676 | 4931197 | 0.31% |
| 2026 | 2896783 | 2117380 | 5014162 | 0 | 0 | 5014162 | 0.00% |
| 2027 | 2954718 | 2159727 | 5114446 | | | 5114446 | |
| 2028 | 3013813 | 2202922 | 5216735 | | | 5216735 | |
| 2029 | 3074089 | 2246980 | 5321069 | | | 5321069 | |
| 2030 | 3135571 | 2291920 | 5427491 | | | 5427491 | |
| 2031 | 3198282 | 2337758 | 5536040 | | | 5536040 | |
| 2032 | 3262248 | 2384513 | 5646761 | | | 5646761 | |
| 2033 | 3327493 | 2432204 | 5759697 | | | 5759697 | |
| 2034 | 3394043 | 2480848 | 5874890 | | | 5874890 | |
| 2035 | 3461923 | 2530465 | 5992388 | | | 5992388 | |
| 2036 | 3531162 | 2581074 | 6112236 | | | 6112236 | |
| 2037 | 3601785 | 2632696 | 6234481 | | | 6234481 | |
| 2038 | 3673821 | 2685349 | 6359170 | | | 6359170 | |
| 2039 | 3747297 | 2739056 | 6486354 | | | 6486354 | |

## Rosewood Laidley Road - Between Karrabin Rosewood Road and Lane Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Rosewood Laidley Road | | | Between Karrabin Rosewood Road and Lane Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 135368 | 166865 | 302233 | | | 302233 | |
| 2019 | 138076 | 170202 | 308278 | | | 308278 | |
| 2020 | 140837 | 173606 | 314443 | | | 314443 | |
| 2021 | 143654 | 177078 | 320732 | | | 320732 | |
| 2022 | 146527 | 180620 | 327147 | 34 | 34 | 327216 | 0.02% |
| 2023 | 149458 | 184232 | 333690 | 920 | 920 | 335530 | 0.55% |
| 2024 | 152447 | 187917 | 340364 | 4473 | 4473 | 349309 | 2.63% |
| 2025 | 155496 | 191675 | 347171 | 1464 | 1464 | 350098 | 0.84% |
| 2026 | 158606 | 195509 | 354114 | 0 | 0 | 354114 | 0.00% |
| 2027 | 161778 | 199419 | 361197 | | | 361197 | |
| 2028 | 165013 | 203407 | 368421 | | | 368421 | |
| 2029 | 168313 | 207475 | 375789 | | | 375789 | |
| 2030 | 171680 | 211625 | 383305 | | | 383305 | |
| 2031 | 175113 | 215857 | 390971 | | | 390971 | |
| 2032 | 178616 | 220175 | 398790 | | | 398790 | |
| 2033 | 182188 | 224578 | 406766 | | | 406766 | |
| 2034 | 185832 | 229070 | 414901 | | | 414901 | |
| 2035 | 189548 | 233651 | 423199 | | | 423199 | |
| 2036 | 193339 | 238324 | 431663 | | | 431663 | |
| 2037 | 197206 | 243091 | 440297 | | | 440297 | |
| 2038 | 201150 | 247952 | 449103 | | | 449103 | |
| 2039 | 205173 | 252911 | 458085 | | | 458085 | |

## Rosewood Laidley Road - Between Lane Road and Grandchester Mount Mort Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Rosewood Laidley Road | | | Between Lane Road and Grandchester Mount Mort Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 135368 | 166865 | 302233 | | | 302233 | |
| 2019 | 138076 | 170202 | 308278 | | | 308278 | |
| 2020 | 140837 | 173606 | 314443 | | | 314443 | |
| 2021 | 143654 | 177078 | 320732 | | | 320732 | |
| 2022 | 146527 | 180620 | 327147 | 2443 | 2443 | 332033 | 1.49% |
| 2023 | 149458 | 184232 | 333690 | 4886 | 4886 | 343463 | 2.93% |
| 2024 | 152447 | 187917 | 340364 | 5853 | 5853 | 352070 | 3.44% |
| 2025 | 155496 | 191675 | 347171 | 1464 | 1464 | 350098 | 0.84% |
| 2026 | 158606 | 195509 | 354114 | 0 | 0 | 354114 | 0.00% |
| 2027 | 161778 | 199419 | 361197 | | | 361197 | |
| 2028 | 165013 | 203407 | 368421 | | | 368421 | |
| 2029 | 168313 | 207475 | 375789 | | | 375789 | |
| 2030 | 171680 | 211625 | 383305 | | | 383305 | |
| 2031 | 175113 | 215857 | 390971 | | | 390971 | |
| 2032 | 178616 | 220175 | 398790 | | | 398790 | |
| 2033 | 182188 | 224578 | 406766 | | | 406766 | |
| 2034 | 185832 | 229070 | 414901 | | | 414901 | |
| 2035 | 189548 | 233651 | 423199 | | | 423199 | |
| 2036 | 193339 | 238324 | 431663 | | | 431663 | |
| 2037 | 197206 | 243091 | 440297 | | | 440297 | |
| 2038 | 201150 | 247952 | 449103 | | | 449103 | |
| 2039 | 205173 | 252911 | 458085 | | | 458085 | |

## Rosewood Laidley Road - Between Grandchester Mount Mort Road and Crown Street

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Rosewood Laidley Road | | | Between Grandchester Mount Mort Road and Crown Street | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | 5% Comparison |
| 2018 | 45123 | 90295 | 135418 | | | 135418 | |
| 2019 | 46025 | 92101 | 138126 | | | 138126 | |
| 2020 | 46946 | 93943 | 140888 | | | 140888 | |
| 2021 | 47885 | 95822 | 143706 | | | 143706 | |
| 2022 | 48842 | 97738 | 146580 | 2443 | 2443 | 151467 | 3.33% |
| 2023 | 49819 | 99693 | 149512 | 4886 | 4886 | 159285 | 6.54% |
| 2024 | 50816 | 101687 | 152502 | 5853 | 5853 | 164208 | 7.68% |
| 2025 | 51832 | 103720 | 155552 | 1464 | 1464 | 158480 | 1.88% |
| 2026 | 52869 | 105795 | 158663 | 0 | 0 | 158663 | 0.00% |
| 2027 | 53926 | 107911 | 161837 | | | 161837 | |
| 2028 | 55004 | 110069 | 165073 | | | 165073 | |
| 2029 | 56104 | 112270 | 168375 | | | 168375 | |
| 2030 | 57227 | 114516 | 171742 | | | 171742 | |
| 2031 | 58371 | 116806 | 175177 | | | 175177 | |
| 2032 | 59539 | 119142 | 178681 | | | 178681 | |
| 2033 | 60729 | 121525 | 182254 | | | 182254 | |
| 2034 | 61944 | 123955 | 185899 | | | 185899 | |
| 2035 | 63183 | 126435 | 189617 | | | 189617 | |
| 2036 | 64446 | 128963 | 193410 | | | 193410 | |
| 2037 | 65735 | 131543 | 197278 | | | 197278 | |
| 2038 | 67050 | 134173 | 201223 | | | 201223 | |
| 2039 | 68391 | 136857 | 205248 | | | 205248 | |

## Rosewood Warrill View Road - Between Ipswich Rosewood Road and Reillys Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Rosewood Warrill View Road | | | Between Ipswich Rosewood Road and Reillys Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 129454 | 175033 | 304487 | | | 304487 | |
| 2019 | 132043 | 178534 | 310577 | | | 310577 | |
| 2020 | 134684 | 182105 | 316788 | | | 316788 | |
| 2021 | 137377 | 185747 | 323124 | | | 323124 | |
| 2022 | 140125 | 189462 | 329587 | 7 | 7 | 329600 | 0.00% |
| 2023 | 142927 | 193251 | 336178 | 14 | 14 | 336206 | 0.01% |
| 2024 | 145786 | 197116 | 342902 | 6492 | 6492 | 355887 | 3.79% |
| 2025 | 148702 | 201058 | 349760 | 12438 | 12438 | 374635 | 7.11% |
| 2026 | 151676 | 205080 | 356755 | 0 | 0 | 356755 | 0.00% |
| 2027 | 154709 | 209181 | 363890 | | | 363890 | |
| 2028 | 157803 | 213365 | 371168 | | | 371168 | |
| 2029 | 160959 | 217632 | 378592 | | | 378592 | |
| 2030 | 164179 | 221985 | 386163 | | | 386163 | |
| 2031 | 167462 | 226424 | 393887 | | | 393887 | |
| 2032 | 170812 | 230953 | 401764 | | | 401764 | |
| 2033 | 174228 | 235572 | 409800 | | | 409800 | |
| 2034 | 177712 | 240283 | 417996 | | | 417996 | |
| 2035 | 181267 | 245089 | 426356 | | | 426356 | |
| 2036 | 184892 | 249991 | 434883 | | | 434883 | |
| 2037 | 188590 | 254991 | 443580 | | | 443580 | |
| 2038 | 192361 | 260090 | 452452 | | | 452452 | |
| 2039 | 196209 | 265292 | 461501 | | | 461501 | |

## Rosewood Warrill View Road - Between Reillys Rd and Ebenezer Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Rosewood Warrill View Road | | | Between Reillys Rd and Ebenezer Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 131012 | 171891 | 302903 | | | 302903 | |
| 2019 | 133633 | 175329 | 308961 | | | 308961 | |
| 2020 | 136305 | 178835 | 315141 | | | 315141 | |
| 2021 | 139031 | 182412 | 321443 | | | 321443 | |
| 2022 | 141812 | 186060 | 327872 | 9604 | 9604 | 347081 | 5.86% |
| 2023 | 144648 | 189781 | 334430 | 10664 | 10664 | 355758 | 6.38% |
| 2024 | 147541 | 193577 | 341118 | 10287 | 10287 | 361693 | 6.03% |
| 2025 | 150492 | 197449 | 347941 | 6707 | 6707 | 361354 | 3.86% |
| 2026 | 153502 | 201398 | 354899 | 0 | 0 | 354899 | 0.00% |
| 2027 | 156572 | 205426 | 361997 | | | 361997 | |
| 2028 | 159703 | 209534 | 369237 | | | 369237 | |
| 2029 | 162897 | 213725 | 376622 | | | 376622 | |
| 2030 | 166155 | 217999 | 384155 | | | 384155 | |
| 2031 | 169478 | 222359 | 391838 | | | 391838 | |
| 2032 | 172868 | 226806 | 399674 | | | 399674 | |
| 2033 | 176325 | 231343 | 407668 | | | 407668 | |
| 2034 | 179852 | 235969 | 415821 | | | 415821 | |
| 2035 | 183449 | 240689 | 424138 | | | 424138 | |
| 2036 | 187118 | 245503 | 432620 | | | 432620 | |
| 2037 | 190860 | 250413 | 441273 | | | 441273 | |
| 2038 | 194677 | 255421 | 450098 | | | 450098 | |
| 2039 | 198571 | 260529 | 459100 | | | 459100 | |

## Warwick Road - Between Moffatt Road and Lobb Street

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Warwick Road | | | Between Moffatt Road and Lobb Street | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 347839 | 346167 | 694007 | | | 694007 | |
| 2019 | 354796 | 353090 | 707887 | | | 707887 | |
| 2020 | 361892 | 360152 | 722044 | | | 722044 | |
| 2021 | 369130 | 367355 | 736485 | | | 736485 | |
| 2022 | 376513 | 374702 | 751215 | 0 | 0 | 751215 | 0.00% |
| 2023 | 384043 | 382197 | 766239 | 0 | 0 | 766239 | 0.00% |
| 2024 | 391724 | 389840 | 781564 | 0 | 0 | 781564 | 0.00% |
| 2025 | 399558 | 397637 | 797195 | 0 | 0 | 797195 | 0.00% |
| 2026 | 407549 | 405590 | 813139 | 0 | 0 | 813139 | 0.00% |
| 2027 | 415700 | 413702 | 829402 | | | 829402 | |
| 2028 | 424014 | 421976 | 845990 | | | 845990 | |
| 2029 | 432495 | 430415 | 862910 | | | 862910 | |
| 2030 | 441145 | 439024 | 880168 | | | 880168 | |
| 2031 | 449967 | 447804 | 897772 | | | 897772 | |
| 2032 | 458967 | 456760 | 915727 | | | 915727 | |
| 2033 | 468146 | 465895 | 934042 | | | 934042 | |
| 2034 | 477509 | 475213 | 952722 | | | 952722 | |
| 2035 | 487059 | 484718 | 971777 | | | 971777 | |
| 2036 | 496800 | 494412 | 991212 | | | 991212 | |
| 2037 | 506736 | 504300 | 1011037 | | | 1011037 | |
| 2038 | 516871 | 514386 | 1031257 | | | 1031257 | |
| 2039 | 527209 | 524674 | 1051882 | | | 1051882 | |

## Warwick Road - Between Lobb Street and Cunningham Highway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Warwick Road | | | Between Lobb Street and Cunningham Highway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 621706 | 618717 | 1240423 | | | 1240423 | |
| 2019 | 634140 | 631092 | 1265232 | | | 1265232 | |
| 2020 | 646823 | 643713 | 1290536 | | | 1290536 | |
| 2021 | 659760 | 656588 | 1316347 | | | 1316347 | |
| 2022 | 672955 | 669719 | 1342674 | 0 | 0 | 1342674 | 0.00% |
| 2023 | 686414 | 683114 | 1369528 | 0 | 0 | 1369528 | 0.00% |
| 2024 | 700142 | 696776 | 1396918 | 0 | 0 | 1396918 | 0.00% |
| 2025 | 714145 | 710712 | 1424857 | 0 | 0 | 1424857 | 0.00% |
| 2026 | 728428 | 724926 | 1453354 | 0 | 0 | 1453354 | 0.00% |
| 2027 | 742996 | 739424 | 1482421 | | | 1482421 | |
| 2028 | 757856 | 754213 | 1512069 | | | 1512069 | |
| 2029 | 773013 | 769297 | 1542311 | | | 1542311 | |
| 2030 | 788474 | 784683 | 1573157 | | | 1573157 | |
| 2031 | 804243 | 800377 | 1604620 | | | 1604620 | |
| 2032 | 820328 | 816384 | 1636712 | | | 1636712 | |
| 2033 | 836735 | 832712 | 1669447 | | | 1669447 | |
| 2034 | 853469 | 849366 | 1702835 | | | 1702835 | |
| 2035 | 870539 | 866353 | 1736892 | | | 1736892 | |
| 2036 | 887950 | 883681 | 1771630 | | | 1771630 | |
| 2037 | 905709 | 901354 | 1807063 | | | 1807063 | |
| 2038 | 923823 | 919381 | 1843204 | | | 1843204 | |
| 2039 | 942299 | 937769 | 1880068 | | | 1880068 | |

## Warrego Highway - Between Haigslea Amberley Road and Brisbane Valley Highway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Warrego Highway | | | Between Haigslea Amberley Road and Brisbane Valley Highway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | 5% Comparison |
| 2018 | 2198729 | 2287523 | 4486252 | | | 4486252 | |
| 2019 | 2242704 | 2333273 | 4575977 | | | 4575977 | |
| 2020 | 2287558 | 2379939 | 4667497 | | | 4667497 | |
| 2021 | 2333309 | 2427538 | 4760847 | | | 4760847 | |
| 2022 | 2379975 | 2476088 | 4856064 | 0 | 0 | 4856064 | 0.00% |
| 2023 | 2427575 | 2525610 | 4953185 | 0 | 0 | 4953185 | 0.00% |
| 2024 | 2476126 | 2576122 | 5052249 | 0 | 0 | 5052249 | 0.00% |
| 2025 | 2525649 | 2627645 | 5153294 | 1409 | 1409 | 5156111 | 0.05% |
| 2026 | 2576162 | 2680198 | 5256360 | 0 | 0 | 5256360 | 0.00% |
| 2027 | 2627685 | 2733802 | 5361487 | | | 5361487 | |
| 2028 | 2680239 | 2788478 | 5468716 | | | 5468716 | |
| 2029 | 2733844 | 2844247 | 5578091 | | | 5578091 | |
| 2030 | 2788520 | 2901132 | 5689653 | | | 5689653 | |
| 2031 | 2844291 | 2959155 | 5803446 | | | 5803446 | |
| 2032 | 2901177 | 3018338 | 5919515 | | | 5919515 | |
| 2033 | 2959200 | 3078705 | 6037905 | | | 6037905 | |
| 2034 | 3018384 | 3140279 | 6158663 | | | 6158663 | |
| 2035 | 3078752 | 3203084 | 6281836 | | | 6281836 | |
| 2036 | 3140327 | 3267146 | 6407473 | | | 6407473 | |
| 2037 | 3203133 | 3332489 | 6535622 | | | 6535622 | |
| 2038 | 3267196 | 3399139 | 6666335 | | | 6666335 | |
| 2039 | 3332540 | 3467121 | 6799662 | | | 6799662 | |

## Warrego Highway - Between Brisbane Valley Highway and Pine Mountain Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Warrego Highway | | | Between Brisbane Valley Highway and Pine Mountain Road | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | 5% Comparison |
| 2018 | 3219688 | 2878921 | 6098609 | | | 6098609 | |
| 2019 | 3284081 | 2936500 | 6220581 | | | 6220581 | |
| 2020 | 3349763 | 2995230 | 6344993 | | | 6344993 | |
| 2021 | 3416758 | 3055134 | 6471893 | | | 6471893 | |
| 2022 | 3485093 | 3116237 | 6601331 | 0 | 0 | 6601331 | 0.00% |
| 2023 | 3554795 | 3178562 | 6733357 | 0 | 0 | 6733357 | 0.00% |
| 2024 | 3625891 | 3242133 | 6868024 | 0 | 0 | 6868024 | 0.00% |
| 2025 | 3698409 | 3306976 | 7005385 | 1409 | 1409 | 7008202 | 0.04% |
| 2026 | 3772377 | 3373115 | 7145493 | 0 | 0 | 7145493 | 0.00% |
| 2027 | 3847825 | 3440578 | 7288402 | | | 7288402 | |
| 2028 | 3924781 | 3509389 | 7434170 | | | 7434170 | |
| 2029 | 4003277 | 3579577 | 7582854 | | | 7582854 | |
| 2030 | 4083342 | 3651168 | 7734511 | | | 7734511 | |
| 2031 | 4165009 | 3724192 | 7889201 | | | 7889201 | |
| 2032 | 4248309 | 3798676 | 8046985 | | | 8046985 | |
| 2033 | 4333276 | 3874649 | 8207925 | | | 8207925 | |
| 2034 | 4419941 | 3952142 | 8372083 | | | 8372083 | |
| 2035 | 4508340 | 4031185 | 8539525 | | | 8539525 | |
| 2036 | 4598507 | 4111809 | 8710316 | | | 8710316 | |
| 2037 | 4690477 | 4194045 | 8884522 | | | 8884522 | |
| 2038 | 4784286 | 4277926 | 9062212 | | | 9062212 | |
| 2039 | 4879972 | 4363484 | 9243457 | | | 9243457 | |

## Warrego Highway - Between Pine Mountain Road and Cunningham Highway

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| | Warrego Highway | | | Between Pine Mountain Road and Cunningham Highway | | | |
|---|---|---|---|---|---|---|---|
| | Base SAR's | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 3587594 | 3426761 | 7014355 | | | 7014355 | |
| 2019 | 3659346 | 3495296 | 7154642 | | | 7154642 | |
| 2020 | 3732533 | 3565202 | 7297735 | | | 7297735 | |
| 2021 | 3807184 | 3636506 | 7443690 | | | 7443690 | |
| 2022 | 3883328 | 3709236 | 7592564 | 0 | 0 | 7592564 | 0.00% |
| 2023 | 3960994 | 3783421 | 7744415 | 0 | 0 | 7744415 | 0.00% |
| 2024 | 4040214 | 3859089 | 7899303 | 0 | 0 | 7899303 | 0.00% |
| 2025 | 4121018 | 3936271 | 8057289 | 1409 | 1409 | 8060107 | 0.03% |
| 2026 | 4203439 | 4014997 | 8218435 | 0 | 0 | 8218435 | 0.00% |
| 2027 | 4287508 | 4095296 | 8382804 | | | 8382804 | |
| 2028 | 4373258 | 4177202 | 8550460 | | | 8550460 | |
| 2029 | 4460723 | 4260746 | 8721469 | | | 8721469 | |
| 2030 | 4549937 | 4345961 | 8895899 | | | 8895899 | |
| 2031 | 4640936 | 4432881 | 9073817 | | | 9073817 | |
| 2032 | 4733755 | 4521538 | 9255293 | | | 9255293 | |
| 2033 | 4828430 | 4611969 | 9440399 | | | 9440399 | |
| 2034 | 4924998 | 4704208 | 9629207 | | | 9629207 | |
| 2035 | 5023498 | 4798293 | 9821791 | | | 9821791 | |
| 2036 | 5123968 | 4894258 | 10018227 | | | 10018227 | |
| 2037 | 5226448 | 4992144 | 10218591 | | | 10218591 | |
| 2038 | 5330977 | 5091986 | 10422963 | | | 10422963 | |
| 2039 | 5437596 | 5193826 | 10631422 | | | 10631422 | |

## Warrill View Peak Crossing Road - Between Peak Crossing Churchbank Weir Road and Ipswich Boonah Road

| SAR's per heavy vehicle - Development | Loaded | Unloaded |
|---|---|---|
| Class 3 | n/a | n/a |
| Class 4 | n/a | n/a |
| Class 5 | 4.09 | n/a |
| Class 6 | n/a | n/a |
| Class 7 | 5.02 | n/a |
| Class 8 | n/a | n/a |
| Class 9 | n/a | n/a |
| Class 10 | 7.72 | n/a |
| Class 11 | n/a | n/a |
| Class 12 | n/a | n/a |
| Special | 12.21 | n/a |

| Warrill View Peak Crossing Road | | | | Between Peak Crossing Churchbank Weir Road and Ipswich Boonah Road | | | |
|---|---|---|---|---|---|---|---|
| Base SAR's | | | | Development SAR's | | | 5% Comparison |
| | Total Base SAR's (Anti-Gazettal directio | Total Base SAR's (Gazettal directional) | Total Base SAR's (Bi-directional) | Unloaded | Loaded | Total (Base + Development) | |
| 2018 | 13551 | 13037 | 26588 | | | 26588 | |
| 2019 | 13822 | 13298 | 27120 | | | 27120 | |
| 2020 | 14099 | 13564 | 27662 | | | 27662 | |
| 2021 | 14381 | 13835 | 28215 | | | 28215 | |
| 2022 | 14668 | 14112 | 28780 | 11420 | 11420 | 51621 | 79.36% |
| 2023 | 14962 | 14394 | 29355 | 25612 | 25612 | 80580 | 174.50% |
| 2024 | 15261 | 14682 | 29942 | 25612 | 25612 | 81167 | 171.08% |
| 2025 | 15566 | 14975 | 30541 | 14940 | 14940 | 60422 | 97.84% |
| 2026 | 15877 | 15275 | 31152 | 0 | 0 | 31152 | 0.00% |
| 2027 | 16195 | 15580 | 31775 | | | 31775 | |
| 2028 | 16519 | 15892 | 32411 | | | 32411 | |
| 2029 | 16849 | 16210 | 33059 | | | 33059 | |
| 2030 | 17186 | 16534 | 33720 | | | 33720 | |
| 2031 | 17530 | 16865 | 34394 | | | 34394 | |
| 2032 | 17880 | 17202 | 35082 | | | 35082 | |
| 2033 | 18238 | 17546 | 35784 | | | 35784 | |
| 2034 | 18603 | 17897 | 36500 | | | 36500 | |
| 2035 | 18975 | 18255 | 37230 | | | 37230 | |
| 2036 | 19354 | 18620 | 37974 | | | 37974 | |
| 2037 | 19741 | 18992 | 38734 | | | 38734 | |
| 2038 | 20136 | 19372 | 39508 | | | 39508 | |
| 2039 | 20539 | 19760 | 40299 | | | 40299 | |

# APPENDIX

# U

# Traffic Impact Assessment Technical Report

## Appendix P Public Transport and Principle Cycle Network Plan Maps

**CALVERT TO KAGARU** ENVIRONMENTAL IMPACT STATEMENT

IR_1381

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

**Legend**

- Existing rail
- Construction routes
- Route 515 - conflict with construction traffic routes

A3 scale: 1:70,000

0 0.5 1 1.5 2 2.5 km

Future Freight
Integrating Community, Environment and Engineering

Issue date: 04/11/2019 Version: 2
Coordinate System: GDA 1994 MGA Zone 56

**Calvert to Kagaru**

**Appendix P1: Public transport and principle cycle network plan maps**

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

**Legend**

- 5 Chainage (km)
- Existing rail
- G2H project alignment
- H2C project alignment
- C2K project alignment
- Construction routes
- Route 539 - conflict with C2K rail alignmnet

A3 scale: 1:160,000

0 1 2 3 4 5km

Future Freight
Integrating Community, Environment and Engineering

Issue date: 04/11/2019 Version: 2
Coordinate System: GDA 1994 MGA Zone 56

**Calvert to Kagaru**

**Appendix P2: Public transport and principle cycle network plan maps**

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Map by: DMoP/MEF Z:\GIS\GIS_3400_C2K\Tasks\3340-ITR-20190813 1542_Public_Transport_Cycling_Maps\340-ITR_Public_Transport_FFJV_v2.mxd Date: 5/11/2019 13:10

**Legend**

- Construction routes
- Route 376 - conflict with construction traffic routes

A3 scale: 1:15,000

0 0.1 0.2 0.3 0.4 0.5 km

Future Freight
Integrating Community, Environment and Engineering

Issue date: 04/11/2019 Version: 2
Coordinate System: GDA 1994 MGA Zone 56

**Calvert to Kagaru**

**Appendix P3: Public transport and principle cycle network plan maps**

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Map by: DMoP/MEF Z:\GIS\GIS_3400_C2KTarks\3400-ITR-20190813 1542_Public_Transport_Cycling_Maps\3400-ITR_Public_Transport_FFJV_v2.mxd Date: 5/11/2019 13:10

**Legend**

- Construction routes
- Route 375C - conflict with construction traffic routes

A3 scale: 1:20,000

0 0.15 0.3 0.45 0.6 0.75km

Future Freight
Integrating Community, Environment and Engineering

Issue date: 04/11/2019 Version: 2
Coordinate System: GDA 1994 MGA Zone 56

**Calvert to Kagaru**

**Appendix P4: Public transport and principle cycle network plan maps**

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

**Legend**

- Construction routes
- Route 377 - conflict with construction traffic routes

A3 scale: 1:40,000

0 0.3 0.6 0.9 1.2 1.5km

Future Freight
Integrating Community, Environment and Engineering

Issue date: 04/11/2019 Version: 2
Coordinate System: GDA 1994 MGA Zone 56

**Calvert to Kagaru**

**Appendix P5: Public transport and principle cycle network plan maps**

Map by: D.McPhMEF Z:\GIS\GIS_3400_C2K\Tasks\340-ITR-20190813 1542_Public_Transport_Cycling_Maps\340-ITR_Public_Transport_FFJV_v2.mxd Date: 5/11/2019 13:10

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

**Legend**

- 5 Chainage (km)
- Existing rail
- B2G project alignment
- G2H project alignment
- H2C project alignment
- C2K project alignment
- K2ARB project alignment
- Local Government Areas
- Construction routes
- Principle cycle network

A3 scale: 1:680,000

0 5 10 15 20 25 km

Future Freight
Integrating Community, Environment and Engineering

Issue date: 04/11/2019 Version: 2
Coordinate System: GDA 1994 MGA Zone 56

**Calvert to Kagaru**

**Appendix P6: Public transport and principle cycle network plan maps**