



| 2030 Interstate 75 Northbound Freeway Segments | | | | | | | |
|--|--------------------------|--------|-----|--------------------|--------|-----|--------------------|
| Segment | | AM | | | PM | | |
| From | To | Volume | LOS | Density (pc/mi/ln) | Volume | LOS | Density (pc/mi/ln) |
| Paddock Road | Towne Street | 7,488 | F | * | 7,133 | F | * |
| Towne Street | SR 562 (Norwood Lateral) | 7,703 | E | 42.6 | 6,546 | D | 32.4 |
| SR 562 (Norwood Lateral) | Mitchell Avenue | 7,269 | F | * | 6,772 | F | * |
| Mitchell Avenue | I-74 | 7,402 | F | * | 6,162 | F | * |
| I-74 | Bates Avenue | 7,080 | E | 36.3 | 9,149 | F | * |
| Bates Avenue | Hopple Street | 6,849 | D | 34.5 | 8,469 | F | * |
| Hopple Street | Western Hills Viaduct | 7,397 | E | 39.2 | 8,891 | F | * |

* - Capacity exceeds HCS calculations

| 2030 Interstate 75 Southbound Freeway Segments | | | | | | | |
|--|--------------------------|--------|-----|--------------------|--------|-----|--------------------|
| Segment | | AM | | | PM | | |
| From | To | Volume | LOS | Density (pc/mi/ln) | Volume | LOS | Density (pc/mi/ln) |
| Paddock Road | SR 562 (Norwood Lateral) | 8,464 | F | * | 8,112 | F | * |
| SR 562 (Norwood Lateral) | Mitchell Avenue | 7,718 | F | * | 7,753 | F | * |
| Mitchell Avenue | I-74 | 6,613 | F | * | 7,713 | F | * |
| I-74 | Hopple Street | 9,781 | F | * | 8,098 | F | * |
| Hopple Street | Western Hills Viaduct | 9,363 | F | * | 7,616 | E | 41.5 |

* - Capacity exceeds HCS calculations

| 2030 Interstate 74 Westbound Freeway Segments | | | | | | | |
|---|----------------------|--------|-----|--------------------|--------|-----|--------------------|
| Segment | | AM | | | PM | | |
| From | To | Volume | LOS | Density (pc/mi/ln) | Volume | LOS | Density (pc/mi/ln) |
| I-75 SB | Spring Grove/Elmore | 2,714 | B | 12.9 | 5,774 | D | 27.4 |
| Spring Grove/Elmore | Colerain Interchange | 2,317 | B | 14.7 | 5,600 | E | 38.1 |
| Colerain Interchange | Montana | 1,993 | B | 12.6 | 5,461 | E | 36.5 |

| 2030 Interstate 74 Eastbound Freeway Segments | | | | | | | |
|---|----------------------|--------|-----|--------------------|--------|-----|--------------------|
| Segment | | AM | | | PM | | |
| From | To | Volume | LOS | Density (pc/mi/ln) | Volume | LOS | Density (pc/mi/ln) |
| I-75 SB | Colerain Interchange | 6,170 | F | * | 2,596 | B | 16.4 |
| Colerain Interchange | Montana | 5,101 | D | 33.0 | 2,311 | B | 14.6 |

* - Capacity exceeds HCS calculations

| 2030 State Route 562 Freeway Segments | | | | | | | |
|---------------------------------------|--------------|--------|-----|--------------------|--------|-----|--------------------|
| Segment | | AM | | | PM | | |
| From | To | Volume | LOS | Density (pc/mi/ln) | Volume | LOS | Density (pc/mi/ln) |
| East bound: I-75 | Paddock Road | 3,574 | E | 35.4 | 3,091 | D | 29.4 |
| Westbound: Paddock Rd | I-75 | 3,265 | D | 31.3 | 2,506 | C | 23.8 |

Unlike 2004, all of Interstate 75 southbound will operate at unacceptable levels of service, as well as most of Interstate 75 northbound. In addition, Interstate 74 westbound will operate at LOS E during the PM design hour while eastbound between I-75 and the Colerain Interchange will operate at LOS F in the AM design hour. Finally, SR 562 eastbound between Paddock Road and I-75 will degrade to a LOS E during the AM design hour.



2030 Ramp-Freeway Junctions. The following table presents the results for each of the merge-diverge locations in 2030. Once again red and orange highlighting was used to indicate the locations of concern.

| 2030 Interstate 75 Northbound Ramps | | | | | |
|--|-----------|-----|--------------------|-----|--------------------|
| Ramp | Junction | AM | | PM | |
| | | LOS | Density (pc/mi/ln) | LOS | Density (pc/mi/ln) |
| Paddock Road Exit Ramp | Diverge | F | 43.3# | F | 42.2# |
| Towne Street Entrance Ramp | Merge | F | 42.2# | F | 41.9# |
| Towne Street Exit Ramp | Diverge | F | 39.7# | F | 35.6# |
| SR 562 (Norwood Lateral) Entrance Ramp | Merge | F | 48.3# | F | 38.9# |
| SR 562 (Norwood Lateral) Exit Ramp | Diverge | F | 44.6# | F | 42.2# |
| Mitchell Avenue Entrance Ramp | Merge | F | 38.6# | F | 36.6# |
| Mitchell Avenue Exit Ramp | Diverge | F | 39.7# | F | 34.7# |
| I-74 Eastbound Entrance Ramp | Merge | F | 28.2# | F | 18.8# |
| I-74 Westbound Exit Ramp | Drop Lane | B | 17.9 | F | * |
| Bates Avenue Entrance Ramp | Merge | C | 27.2 | F | 32.0# |
| Hopple Street Entrance Ramp | Merge | C | 23.7 | F | 28.9# |
| Hopple Street Exit Ramp | Diverge | E | 38.2 | F | 44.8# |
| Western Hill Viaduct Entrance Ramp | Merge | C | 22.6 | F | 27.3# |
| Western Hills Viaduct Exit Ramp | Diverge | D | 33.9 | F | 44.7# |

- The flowrate of the ramp and/or freeway exceeds capacity for the merge/diverge area, resulting in LOS F.

* - Capacity exceeds HCS calculations

| 2030 Interstate 75 Southbound Ramps | | | | | |
|--|----------|-----|--------------------|-----|--------------------|
| Ramp | Junction | AM | | PM | |
| | | LOS | Density (pc/mi/ln) | LOS | Density (pc/mi/ln) |
| Paddock Road Entrance Ramp | Merge | F | 48.4# | F | 46.2# |
| SR 562 (Norwood Lateral) Exit Ramp | Diverge | F | 43.1# | F | 42.9# |
| SR 562 (Norwood Lateral) Entrance Ramp | Merge | F | 47.7# | F | 37.1# |
| Mitchell Avenue Exit Ramp | Diverge | F | 41.9# | F | 41.2# |
| Mitchell Avenue Entrance Ramp | Merge | F | 37.3# | F | 45.1# |
| I-74 Westbound Exit Ramp | Diverge | F | 37.6# | F | 42.5# |
| I-74 Eastbound Entrance Ramp | Add Lane | F | * | C | 19.7 |
| Hopple Street Exit Ramp | Diverge | F | 46.3# | F | 38.5# |
| Hopple Street Entrance Ramp | Merge | F | 34.1# | D | 28.4 |
| Western Hill Viaduct Exit Ramp | Diverge | F | 41.8# | D | 34.9 |
| Western Hills Viaduct Entrance Ramp | Add Lane | F | * | E | 37.2 |

- The flowrate of the ramp and/or freeway exceeds capacity for the merge/diverge area, resulting in LOS F.

* - Capacity exceeds HCS calculations



| 2030 Interstate 74 Westbound Ramps | | | | | |
|-------------------------------------|-----------|-----|--------------------|-----|--------------------|
| Ramp | Junction | AM | | PM | |
| | | LOS | Density (pc/mi/ln) | LOS | Density (pc/mi/ln) |
| I-75 Southbound Entrance Ramp | Add Lane | B | 16.9 | D | 32.6 |
| I-75 Northbound Entrance Ramp | Add Lane | B | 17.9 | F | * |
| Colerain Ave. @ Spring Grove/Elmore | Diverge | B | 16.6 | D | 31.5 |
| Colerain Interchange Exit Ramp | Drop Lane | A | 10.0 | C | 20.0 |
| Colerain Interchange Entrance Ramp | Add Lane | B | 11.6 | D | 29.3 |
| Montana Avenue Exit Ramp | Drop Lane | A | 10.4 | D | 26.9 |

* - Capacity exceeds HCS calculations

| 2030 Interstate 74 Eastbound Ramps | | | | | |
|------------------------------------|-----------|-----|--------------------|-----|--------------------|
| Ramp | Junction | AM | | PM | |
| | | LOS | Density (pc/mi/ln) | LOS | Density (pc/mi/ln) |
| I-75 Southbound Exit Ramp | Drop Lane | F | * | C | 19.7 |
| I-75 Northbound Exit Ramp | Drop Lane | C | 23.8 | A | 9.2 |
| Spring Grove Avenue Entrance Ramp | Merge | F | 60.2# | D | 29.2 |
| Colerain Interchange Entrance Ramp | Add Lane | E | 35.0 | A | 10.5 |
| Colerain Interchange Exit Ramp | Drop Lane | D | 28.3 | B | 13.2 |
| Montana Avenue Entrance Ramp | Add Lane | D | 27.4 | B | 11.5 |

- The flowrate of the ramp and/or freeway exceeds capacity for the merge/diverge area, resulting in LOS F.

* - Capacity exceeds HCS calculations

| 2030 State Route 562 Ramps | | | | | |
|---------------------------------------|----------|-----|--------------------|-----|--------------------|
| Ramp | Junction | AM | | PM | |
| | | LOS | Density (pc/mi/ln) | LOS | Density (pc/mi/ln) |
| Paddock Rd to SR 562 EB Entrance Ramp | Merge | D | 34.0 | D | 34.1 |
| SR 562 EB to Paddock Rd Exit Ramp | Diverge | E | 37.5 | D | 32.7 |
| Paddock Rd to SR 562 WB Entrance Ramp | Merge | D | 31.9 | C | 25.2 |
| SR 562 WB to Paddock Rd Exit Ramp | Diverge | E | 37.0 | D | 34.4 |

As with the freeway segments, the ramp junctions on Interstate 75 will severely degrade by Year 2030. All of the I-75 northbound ramp junctions will operate at a LOS F during the PM design hour and most will operate at an unacceptable level-of-service during the AM design hour. For Interstate 75 southbound during the AM design hour, all of the ramp junctions will operate at a LOS F and most will operate at a LOS F during the PM design hour. Additionally, the I-75 northbound entrance ramp to I-74 westbound will operate at a LOS F. I-74 eastbound, the I-75 southbound exit ramp, Spring Grove Avenue entrance ramp and the Colerain Interchange entrance ramp will fail. Finally, the SR 562 entrance ramps in both directions will operate at a LOS E.

2030 At-grade Local Street Intersection Analyses. The following tables present the intersections evaluated as part of this study and the results obtained for each location for 2030. Once again red and orange highlighting was used to detail the locations of interest.