# APPENDIX B – EXISTING CONDITIONS

## EXISTING TRAFFIC OPERATIONS

## INTERSECTION CRASH DIAGRAMS

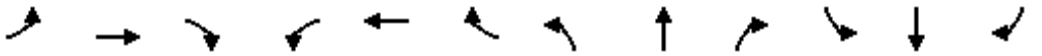
| Intersection | |
|---|---|
| Int Delay, s/veh | 10.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↑ | ↗ | | ↕ | |
| Traffic Vol, veh/h | 0 | 2 | 1 | 511 | 4 | 11 | 0 | 9 | 356 | 7 | 6 | 0 |
| Future Vol, veh/h | 0 | 2 | 1 | 511 | 4 | 11 | 0 | 9 | 356 | 7 | 6 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | 100 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 0 | 18 | 0 | 0 | 1 | 14 | 17 | 0 |
| Mvmt Flow | 0 | 2 | 1 | 631 | 5 | 14 | 0 | 11 | 440 | 9 | 7 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 19 | 0 | 0 | 3 | 0 | 0 | - | 1284 | 3 | 1282 | 1277 | 12 |
| Stage 1 | - | - | - | - | - | - | - | 3 | - | 1274 | 1274 | - |
| Stage 2 | - | - | - | - | - | - | - | 1281 | - | 8 | 3 | - |
| Critical Hdwy | 4.1 | - | - | 4.12 | - | - | - | 6.5 | 6.21 | 7.24 | 6.67 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | 5.5 | - | 6.24 | 5.67 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | 5.5 | - | 6.24 | 5.67 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.218 | - | - | - | 4 | 3.309 | 3.626 | 4.153 | 3.3 |
| Pot Cap-1 Maneuver | 1611 | - | - | 1619 | - | - | 0 | 166 | 1084 | 134 | 155 | 1074 |
| Stage 1 | - | - | - | - | - | - | 0 | 897 | - | 194 | 222 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 238 | - | 983 | 864 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1611 | - | - | 1619 | - | - | - | 101 | 1084 | 51 | 94 | 1074 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | 101 | - | 51 | 94 | - |
| Stage 1 | - | - | - | - | - | - | - | 897 | - | 194 | 135 | - |
| Stage 2 | - | - | - | - | - | - | - | 144 | - | 577 | 864 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 8.4 | 11.4 | 77.7 |
| HCM LOS | | | B | F |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 101 | 1084 | 1611 | - | - | 1619 | - | - | 65 |
| HCM Lane V/C Ratio | 0.11 | 0.405 | - | - | - | 0.39 | - | - | 0.247 |
| HCM Control Delay (s) | 45 | 10.6 | 0 | - | - | 8.6 | 0 | - | 77.7 |
| HCM Lane LOS | E | B | A | - | - | A | A | - | F |
| HCM 95th %tile Q(veh) | 0.4 | 2 | 0 | - | - | 1.9 | - | - | 0.9 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 88 | 256 | 15 | 203 | 288 | 65 | 4 | 37 | 128 | 165 | 192 | 202 |
| Future Volume (veh/h) | 88 | 256 | 15 | 203 | 288 | 65 | 4 | 37 | 128 | 165 | 192 | 202 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1400 | 1400 | 1500 | 1465 | 1465 | 1500 | 1500 | 1500 | 1488 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 104 | 301 | 18 | 239 | 339 | 76 | 5 | 44 | 151 | 194 | 226 | 238 |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 0 |
| Cap, veh/h | 666 | 642 | 38 | 739 | 612 | 137 | 69 | 50 | 171 | 230 | 169 | 178 |
| Arrive On Green | 0.05 | 0.49 | 0.49 | 0.12 | 0.70 | 0.70 | 0.01 | 0.17 | 0.17 | 0.09 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1333 | 1308 | 78 | 1429 | 1158 | 260 | 1429 | 297 | 1019 | 1417 | 669 | 704 |
| Grp Volume(v), veh/h | 104 | 0 | 319 | 239 | 0 | 415 | 5 | 0 | 195 | 194 | 0 | 464 |
| Grp Sat Flow(s),veh/h/ln | 1333 | 0 | 1386 | 1429 | 0 | 1418 | 1429 | 0 | 1317 | 1417 | 0 | 1373 |
| Q Serve(g_s), s | 4.6 | 0.0 | 18.3 | 10.0 | 0.0 | 17.1 | 0.3 | 0.0 | 17.4 | 11.0 | 0.0 | 30.3 |
| Cycle Q Clear(g_c), s | 4.6 | 0.0 | 18.3 | 10.0 | 0.0 | 17.1 | 0.3 | 0.0 | 17.4 | 11.0 | 0.0 | 30.3 |
| Prop In Lane | 1.00 | | 0.06 | 1.00 | | 0.18 | 1.00 | | 0.77 | 1.00 | | 0.51 |
| Lane Grp Cap(c), veh/h | 666 | 0 | 681 | 739 | 0 | 750 | 69 | 0 | 220 | 230 | 0 | 347 |
| V/C Ratio(X) | 0.16 | 0.00 | 0.47 | 0.32 | 0.00 | 0.55 | 0.07 | 0.00 | 0.89 | 0.84 | 0.00 | 1.34 |
| Avail Cap(c_a), veh/h | 716 | 0 | 681 | 739 | 0 | 750 | 191 | 0 | 296 | 230 | 0 | 347 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 0.83 | 0.00 | 0.83 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 14.2 | 0.0 | 20.2 | 13.2 | 0.0 | 10.9 | 42.8 | 0.0 | 48.8 | 41.3 | 0.0 | 44.8 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 2.3 | 0.2 | 0.0 | 2.4 | 0.4 | 0.0 | 20.9 | 23.6 | 0.0 | 170.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 0.0 | 6.1 | 2.8 | 0.0 | 4.5 | 0.1 | 0.0 | 7.0 | 3.0 | 0.0 | 26.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 14.3 | 0.0 | 22.5 | 13.4 | 0.0 | 13.4 | 43.2 | 0.0 | 69.7 | 64.9 | 0.0 | 215.3 |
| LnGrp LOS | B | A | C | B | A | B | D | A | E | E | A | F |
| Approach Vol, veh/h | | 423 | | | 654 | | | 200 | | | 658 | |
| Approach Delay, s/veh | | 20.5 | | | 13.4 | | | 69.1 | | | 171.0 | |
| Approach LOS | | C | | | B | | | E | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 15.0 | 64.9 | 4.8 | 35.3 | 10.5 | 69.4 | 15.0 | 25.1 |
| Change Period (Y+Rc), s | 4.0 | 6.0 | 4.0 | 5.0 | 4.0 | 6.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 11.0 | 52.0 | 11.0 | 27.0 | 11.0 | 52.0 | 11.0 | 27.0 |
| Max Q Clear Time (g_c+I1), s | 12.0 | 20.3 | 2.3 | 32.3 | 6.6 | 19.1 | 13.0 | 19.4 |
| Green Ext Time (p_c), s | 0.0 | 1.9 | 0.0 | 0.0 | 0.1 | 2.7 | 0.0 | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 74.3 |
| HCM 6th LOS | E |

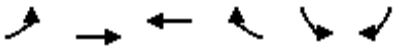
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 6 | 409 | 138 | 176 | 465 | 43 | 53 | 37 | 180 | 108 | 79 | 37 |
| Future Volume (veh/h) | 6 | 409 | 138 | 176 | 465 | 43 | 53 | 37 | 180 | 108 | 79 | 37 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1389 | 1389 | 1477 | 1477 | 1477 | 1453 | 1371 | 1477 | 1465 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 7 | 470 | 159 | 202 | 534 | 49 | 61 | 43 | 207 | 124 | 91 | 43 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 0 | 1 | 1 | 2 | 2 | 2 | 4 | 11 | 2 | 3 | 0 | 0 |
| Cap, veh/h | 595 | 882 | 748 | 688 | 978 | 90 | 224 | 239 | 300 | 309 | 168 | 79 |
| Arrive On Green | 0.64 | 0.64 | 0.64 | 0.04 | 0.48 | 0.48 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Sat Flow, veh/h | 1183 | 1389 | 1177 | 1406 | 1332 | 122 | 1854 | 1371 | 1251 | 1681 | 963 | 455 |
| Grp Volume(v), veh/h | 7 | 470 | 159 | 202 | 0 | 583 | 61 | 43 | 207 | 124 | 0 | 134 |
| Grp Sat Flow(s),veh/h/ln | 1183 | 1389 | 1177 | 1406 | 0 | 1455 | 1854 | 1371 | 1251 | 1681 | 0 | 1418 |
| Q Serve(g_s), s | 0.4 | 22.4 | 6.8 | 5.5 | 0.0 | 33.7 | 3.7 | 3.2 | 18.1 | 8.1 | 0.0 | 10.3 |
| Cycle Q Clear(g_c), s | 22.3 | 22.4 | 6.8 | 5.5 | 0.0 | 33.7 | 14.1 | 3.2 | 18.1 | 11.3 | 0.0 | 10.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.08 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 595 | 882 | 748 | 688 | 0 | 1067 | 224 | 239 | 300 | 309 | 0 | 248 |
| V/C Ratio(X) | 0.01 | 0.53 | 0.21 | 0.29 | 0.00 | 0.55 | 0.27 | 0.18 | 0.69 | 0.40 | 0.00 | 0.54 |
| Avail Cap(c_a), veh/h | 595 | 882 | 748 | 772 | 0 | 1067 | 379 | 354 | 405 | 449 | 0 | 366 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.80 | 0.80 | 0.80 | 0.69 | 0.00 | 0.69 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.1 | 12.1 | 9.2 | 8.8 | 0.0 | 16.9 | 51.5 | 42.2 | 41.5 | 47.0 | 0.0 | 45.1 |
| Incr Delay (d2), s/veh | 0.0 | 1.8 | 0.5 | 0.2 | 0.0 | 1.4 | 0.6 | 0.4 | 3.0 | 0.8 | 0.0 | 1.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 6.9 | 1.8 | 1.5 | 0.0 | 12.4 | 1.8 | 1.1 | 5.8 | 3.5 | 0.0 | 3.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 18.1 | 13.9 | 9.8 | 8.9 | 0.0 | 18.3 | 52.2 | 42.6 | 44.6 | 47.9 | 0.0 | 47.0 |
| LnGrp LOS | B | B | A | A | A | B | D | D | D | D | A | D |
| Approach Vol, veh/h | | 636 | | | 785 | | | 311 | | | 258 | |
| Approach Delay, s/veh | | 12.9 | | | 15.9 | | | 45.8 | | | 47.4 | |
| Approach LOS | | B | | | B | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.8 | 82.2 | | 26.0 | | 94.0 | | 26.0 | | | | |
| Change Period (Y+Rc), s | 4.0 | 6.0 | | 5.0 | | 6.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 59.0 | | 31.0 | | 78.0 | | 31.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.5 | 24.4 | | 13.3 | | 35.7 | | 20.1 | | | | |
| Green Ext Time (p_c), s | 0.3 | 3.8 | | 1.0 | | 4.4 | | 0.9 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.7 |
| HCM 6th LOS | C |

Notes

User approved pedestrian interval to be less than phase max green.



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 12 | 685 | 674 | 52 | 80 | 5 |
| Future Volume (veh/h) | 12 | 685 | 674 | 52 | 80 | 5 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | | 1.00 | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | No | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1378 | 1477 | 1477 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 13 | 737 | 725 | 56 | 86 | 5 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 2 | 2 | 2 | 0 | 0 |
| Cap, veh/h | 684 | 1144 | 1123 | 87 | 104 | 6 |
| Arrive On Green | 0.83 | 0.83 | 0.83 | 0.83 | 0.08 | 0.08 |
| Sat Flow, veh/h | 984 | 1378 | 1353 | 105 | 1327 | 77 |
| Grp Volume(v), veh/h | 13 | 737 | 0 | 781 | 92 | 0 |
| Grp Sat Flow(s),veh/h/ln | 984 | 1378 | 0 | 1458 | 1420 | 0 |
| Q Serve(g_s), s | 0.6 | 23.5 | 0.0 | 23.5 | 7.7 | 0.0 |
| Cycle Q Clear(g_c), s | 24.1 | 23.5 | 0.0 | 23.5 | 7.7 | 0.0 |
| Prop In Lane | 1.00 | | | 0.07 | 0.93 | 0.05 |
| Lane Grp Cap(c), veh/h | 684 | 1144 | 0 | 1210 | 111 | 0 |
| V/C Ratio(X) | 0.02 | 0.64 | 0.00 | 0.65 | 0.83 | 0.00 |
| Avail Cap(c_a), veh/h | 684 | 1144 | 0 | 1210 | 319 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.83 | 0.83 | 0.00 | 0.56 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 8.2 | 3.7 | 0.0 | 3.7 | 54.5 | 0.0 |
| Incr Delay (d2), s/veh | 0.0 | 2.3 | 0.0 | 1.5 | 14.2 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 4.8 | 0.0 | 4.8 | 3.2 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 8.2 | 6.1 | 0.0 | 5.2 | 68.7 | 0.0 |
| LnGrp LOS | A | A | A | A | E | A |
| Approach Vol, veh/h | | 750 | 781 | | 92 | |
| Approach Delay, s/veh | | 6.1 | 5.2 | | 68.7 | |
| Approach LOS | | A | A | | E | |

| Timer - Assigned Phs | 2 | | 4 | | 6 |
|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 105.6 | | 14.4 | | 105.6 |
| Change Period (Y+Rc), s | 6.0 | | 5.0 | | 6.0 |
| Max Green Setting (Gmax), s | 82.0 | | 27.0 | | 82.0 |
| Max Q Clear Time (g_c+I1), s | 26.1 | | 9.7 | | 25.5 |
| Green Ext Time (p_c), s | 6.2 | | 0.2 | | 6.9 |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | 9.2 | |
| HCM 6th LOS | A | |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 115 | 572 | 35 | 69 | 471 | 63 | 69 | 58 | 81 | 167 | 110 | 176 |
| Future Volume (veh/h) | 115 | 572 | 35 | 69 | 471 | 63 | 69 | 58 | 81 | 167 | 110 | 176 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1378 | 1378 | 1500 | 1453 | 1453 | 1500 | 1500 | 1500 | 1488 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 124 | 615 | 38 | 74 | 506 | 68 | 74 | 62 | 87 | 180 | 118 | 189 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 2 | 2 | 0 | 4 | 4 | 0 | 0 | 0 | 1 | 0 | 0 |
| Cap, veh/h | 370 | 626 | 39 | 206 | 648 | 87 | 138 | 97 | 136 | 319 | 108 | 173 |
| Arrive On Green | 0.04 | 0.32 | 0.32 | 0.09 | 0.52 | 0.52 | 0.05 | 0.17 | 0.17 | 0.09 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1333 | 1285 | 79 | 1429 | 1254 | 169 | 1429 | 565 | 793 | 1417 | 519 | 831 |
| Grp Volume(v), veh/h | 124 | 0 | 653 | 74 | 0 | 574 | 74 | 0 | 149 | 180 | 0 | 307 |
| Grp Sat Flow(s),veh/h/ln | 1333 | 0 | 1364 | 1429 | 0 | 1423 | 1429 | 0 | 1357 | 1417 | 0 | 1350 |
| Q Serve(g_s), s | 5.5 | 0.0 | 57.0 | 2.7 | 0.0 | 39.2 | 5.1 | 0.0 | 12.3 | 11.0 | 0.0 | 25.0 |
| Cycle Q Clear(g_c), s | 5.5 | 0.0 | 57.0 | 2.7 | 0.0 | 39.2 | 5.1 | 0.0 | 12.3 | 11.0 | 0.0 | 25.0 |
| Prop In Lane | 1.00 | | 0.06 | 1.00 | | 0.12 | 1.00 | | 0.58 | 1.00 | | 0.62 |
| Lane Grp Cap(c), veh/h | 370 | 0 | 665 | 206 | 0 | 736 | 138 | 0 | 232 | 319 | 0 | 281 |
| V/C Ratio(X) | 0.34 | 0.00 | 0.98 | 0.36 | 0.00 | 0.78 | 0.54 | 0.00 | 0.64 | 0.56 | 0.00 | 1.09 |
| Avail Cap(c_a), veh/h | 409 | 0 | 665 | 206 | 0 | 736 | 191 | 0 | 283 | 319 | 0 | 281 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.70 | 0.00 | 0.70 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.8 | 0.0 | 40.2 | 25.4 | 0.0 | 23.5 | 39.7 | 0.0 | 46.3 | 38.0 | 0.0 | 47.5 |
| Incr Delay (d2), s/veh | 0.4 | 0.0 | 25.3 | 4.8 | 0.0 | 8.0 | 3.2 | 0.0 | 2.8 | 2.3 | 0.0 | 80.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.7 | 0.0 | 24.5 | 1.3 | 0.0 | 14.4 | 1.9 | 0.0 | 4.4 | 1.1 | 0.0 | 14.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 20.1 | 0.0 | 65.5 | 30.2 | 0.0 | 31.5 | 43.0 | 0.0 | 49.1 | 40.3 | 0.0 | 127.7 |
| LnGrp LOS | C | A | E | C | A | C | D | A | D | D | A | F |
| Approach Vol, veh/h | | 777 | | | 648 | | | 223 | | | 487 | |
| Approach Delay, s/veh | | 58.2 | | | 31.4 | | | 47.1 | | | 95.4 | |
| Approach LOS | | E | | | C | | | D | | | F | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 15.0 | 64.5 | 10.5 | 30.0 | 11.4 | 68.0 | 15.0 | 25.5 |
| Change Period (Y+Rc), s | 4.0 | 6.0 | 4.0 | 5.0 | 4.0 | 6.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 11.0 | 54.0 | 11.0 | 25.0 | 11.0 | 54.0 | 11.0 | 25.0 |
| Max Q Clear Time (g_c+I1), s | 14.7 | 59.0 | 7.1 | 27.0 | 7.5 | 41.2 | 13.0 | 14.3 |
| Green Ext Time (p_c), s | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 3.2 | 0.0 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 57.4 |
| HCM 6th LOS | E |

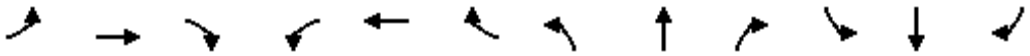
| Intersection | |
|---|---|
| Int Delay, s/veh | 4.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 10 | 739 | 80 | 51 | 607 | 15 | 17 | 5 | 60 | 5 | 15 | 10 |
| Future Vol, veh/h | 10 | 739 | 80 | 51 | 607 | 15 | 17 | 5 | 60 | 5 | 15 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 500 | - | - | 500 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 0 | 1 | 0 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 11 | 821 | 89 | 57 | 674 | 17 | 19 | 6 | 67 | 6 | 17 | 11 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 691 | 0 | 0 | 910 | 0 | 0 | 1699 | 1693 | 866 | 1721 | 1729 | 683 |
| Stage 1 | - | - | - | - | - | - | 888 | 888 | - | 797 | 797 | - |
| Stage 2 | - | - | - | - | - | - | 811 | 805 | - | 924 | 932 | - |
| Critical Hdwy | 4.1 | - | - | 4.2 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.29 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 913 | - | - | 716 | - | - | 74 | 94 | 356 | 71 | 89 | 453 |
| Stage 1 | - | - | - | - | - | - | 341 | 365 | - | 383 | 401 | - |
| Stage 2 | - | - | - | - | - | - | 376 | 398 | - | 326 | 348 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 913 | - | - | 716 | - | - | 57 | 85 | 356 | 51 | 81 | 453 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 57 | 85 | - | 51 | 81 | - |
| Stage 1 | - | - | - | - | - | - | 337 | 361 | - | 378 | 369 | - |
| Stage 2 | - | - | - | - | - | - | 322 | 366 | - | 258 | 344 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.8 | 56.2 | 59.6 |
| HCM LOS | | | F | F |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 156 | 913 | - | - | 716 | - | - | 98 |
| HCM Lane V/C Ratio | 0.584 | 0.012 | - | - | 0.079 | - | - | 0.34 |
| HCM Control Delay (s) | 56.2 | 9 | - | - | 10.5 | - | - | 59.6 |
| HCM Lane LOS | F | A | - | - | B | - | - | F |
| HCM 95th %tile Q(veh) | 3.1 | 0 | - | - | 0.3 | - | - | 1.3 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 75 | 478 | 176 | 222 | 475 | 192 | 110 | 185 | 66 | 295 | 552 | 82 |
| Future Volume (veh/h) | 75 | 478 | 176 | 222 | 475 | 192 | 110 | 185 | 66 | 295 | 552 | 82 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1389 | 1367 | 1378 | 1477 | 1453 | 1477 | 1465 | 1477 | 1442 | 1477 | 1488 | 1488 |
| Adj Flow Rate, veh/h | 86 | 549 | 202 | 255 | 546 | 221 | 126 | 213 | 76 | 339 | 634 | 94 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 1 | 3 | 2 | 2 | 4 | 2 | 3 | 2 | 5 | 2 | 1 | 1 |
| Cap, veh/h | 132 | 755 | 431 | 300 | 509 | 630 | 303 | 775 | 472 | 626 | 868 | 129 |
| Arrive On Green | 0.06 | 0.29 | 0.29 | 0.15 | 0.47 | 0.47 | 0.08 | 0.28 | 0.28 | 0.15 | 0.35 | 0.35 |
| Sat Flow, veh/h | 1323 | 2598 | 1168 | 2728 | 1453 | 1251 | 1395 | 2806 | 1222 | 1406 | 2471 | 366 |
| Grp Volume(v), veh/h | 86 | 549 | 202 | 255 | 546 | 221 | 126 | 213 | 76 | 339 | 362 | 366 |
| Grp Sat Flow(s),veh/h/ln | 1323 | 1299 | 1168 | 1364 | 1453 | 1251 | 1395 | 1403 | 1222 | 1406 | 1414 | 1422 |
| Q Serve(g_s), s | 5.9 | 24.7 | 17.1 | 11.8 | 45.5 | 12.2 | 8.3 | 7.7 | 5.3 | 20.0 | 29.1 | 29.2 |
| Cycle Q Clear(g_c), s | 5.9 | 24.7 | 17.1 | 11.8 | 45.5 | 12.2 | 8.3 | 7.7 | 5.3 | 20.0 | 29.1 | 29.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.26 |
| Lane Grp Cap(c), veh/h | 132 | 755 | 431 | 300 | 509 | 630 | 303 | 775 | 472 | 626 | 497 | 500 |
| V/C Ratio(X) | 0.65 | 0.73 | 0.47 | 0.85 | 1.07 | 0.35 | 0.42 | 0.27 | 0.16 | 0.54 | 0.73 | 0.73 |
| Avail Cap(c_a), veh/h | 167 | 755 | 431 | 420 | 509 | 630 | 311 | 775 | 472 | 626 | 497 | 500 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.79 | 0.79 | 0.79 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.0 | 41.5 | 31.3 | 54.4 | 34.7 | 15.7 | 31.4 | 36.8 | 26.1 | 27.6 | 36.8 | 36.8 |
| Incr Delay (d2), s/veh | 4.5 | 3.4 | 0.6 | 8.2 | 56.8 | 0.2 | 0.7 | 0.9 | 0.7 | 0.8 | 9.1 | 9.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.0 | 8.2 | 4.8 | 4.2 | 22.2 | 3.1 | 2.8 | 2.7 | 1.6 | 7.6 | 11.0 | 11.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 39.5 | 44.8 | 31.8 | 62.6 | 91.6 | 15.9 | 32.0 | 37.7 | 26.8 | 28.4 | 45.8 | 45.9 |
| LnGrp LOS | D | D | C | E | F | B | C | D | C | C | D | D |
| Approach Vol, veh/h | | 837 | | | 1022 | | | 415 | | | 1067 | |
| Approach Delay, s/veh | | 41.1 | | | 68.0 | | | 34.0 | | | 40.3 | |
| Approach LOS | | D | | | E | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 24.0 | 42.4 | 19.3 | 44.3 | 14.2 | 52.2 | 11.6 | 52.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 5.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 20.0 | 32.5 | 20.0 | 35.5 | 11.0 | 41.5 | 11.0 | 45.5 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 9.7 | 13.8 | 26.7 | 10.3 | 31.2 | 7.9 | 47.5 |
| Green Ext Time (p_c), s | 0.0 | 0.9 | 0.4 | 2.0 | 0.0 | 1.8 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 48.2 |
| HCM 6th LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 79 | 705 | 57 | 167 | 824 | 106 | 29 | 41 | 58 | 93 | 40 | 39 |
| Future Volume (veh/h) | 79 | 705 | 57 | 167 | 824 | 106 | 29 | 41 | 58 | 93 | 40 | 39 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1367 | 1367 | 1400 | 1488 | 1465 | 1465 | 1465 | 1500 | 1500 | 1477 | 1477 | 1383 |
| Adj Flow Rate, veh/h | 94 | 839 | 68 | 199 | 981 | 126 | 35 | 49 | 69 | 111 | 48 | 46 |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Percent Heavy Veh, % | 3 | 3 | 0 | 1 | 3 | 3 | 3 | 0 | 0 | 2 | 2 | 10 |
| Cap, veh/h | 423 | 1848 | 844 | 592 | 1808 | 232 | 205 | 161 | 136 | 202 | 158 | 126 |
| Arrive On Green | 0.02 | 0.47 | 0.47 | 0.04 | 0.48 | 0.48 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Sat Flow, veh/h | 1302 | 2598 | 1186 | 1417 | 2481 | 318 | 1937 | 1500 | 1271 | 1911 | 1477 | 1172 |
| Grp Volume(v), veh/h | 94 | 839 | 68 | 199 | 550 | 557 | 35 | 49 | 69 | 111 | 48 | 46 |
| Grp Sat Flow(s),veh/h/ln | 1302 | 1299 | 1186 | 1417 | 1392 | 1408 | 1937 | 1500 | 1271 | 1911 | 1477 | 1172 |
| Q Serve(g_s), s | 2.5 | 28.3 | 4.1 | 4.8 | 36.1 | 36.1 | 2.2 | 3.9 | 6.7 | 7.4 | 3.9 | 4.7 |
| Cycle Q Clear(g_c), s | 2.5 | 28.3 | 4.1 | 4.8 | 36.1 | 36.1 | 6.1 | 3.9 | 6.7 | 11.3 | 3.9 | 4.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.23 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 423 | 1848 | 844 | 592 | 1014 | 1026 | 205 | 161 | 136 | 202 | 158 | 126 |
| V/C Ratio(X) | 0.22 | 0.45 | 0.08 | 0.34 | 0.54 | 0.54 | 0.17 | 0.31 | 0.51 | 0.55 | 0.30 | 0.37 |
| Avail Cap(c_a), veh/h | 535 | 1848 | 844 | 689 | 1014 | 1026 | 519 | 404 | 342 | 512 | 398 | 316 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.71 | 0.71 | 0.71 | 0.83 | 0.83 | 0.83 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 9.6 | 17.5 | 11.0 | 8.2 | 18.5 | 18.5 | 56.4 | 53.6 | 54.8 | 58.8 | 53.6 | 53.9 |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.1 | 0.2 | 1.7 | 1.7 | 0.3 | 0.8 | 2.2 | 1.7 | 0.8 | 1.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 9.2 | 1.0 | 1.2 | 12.8 | 13.0 | 1.1 | 1.5 | 2.2 | 3.7 | 1.5 | 1.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 9.8 | 18.0 | 11.2 | 8.4 | 20.2 | 20.2 | 56.7 | 54.4 | 57.0 | 60.5 | 54.4 | 55.3 |
| LnGrp LOS | A | B | B | A | C | C | E | D | E | E | D | E |
| Approach Vol, veh/h | | 1001 | | | 1306 | | | 153 | | | 205 | |
| Approach Delay, s/veh | | 16.8 | | | 18.4 | | | 56.1 | | | 57.9 | |
| Approach LOS | | B | | | B | | | E | | | E | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.1 | 99.0 | | 19.9 | 8.8 | 101.2 | | 19.9 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | | 6.0 | 4.0 | 6.5 | | 6.0 |
| Max Green Setting (Gmax), s | 16.0 | 62.5 | | 35.0 | 16.0 | 62.5 | | 35.0 |
| Max Q Clear Time (g_c+I1), s | 6.8 | 30.3 | | 13.3 | 4.5 | 38.1 | | 8.7 |
| Green Ext Time (p_c), s | 0.4 | 3.5 | | 0.6 | 0.1 | 3.8 | | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.0 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SBL2 | SBL | SBR | NWL | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑ | ↱ | | ↑↑ | ↱ | ↰ | | ↱ | | |
| Traffic Volume (veh/h) | 0 | 428 | 425 | 0 | 981 | 212 | 78 | 0 | 133 | 0 | 0 |
| Future Volume (veh/h) | 0 | 428 | 425 | 0 | 981 | 212 | 78 | 0 | 133 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Work Zone On Approach | | No | | | No | | | No | | | |
| Adj Sat Flow, veh/h/ln | 0 | 1378 | 1378 | 0 | 1477 | 1477 | 1477 | 1477 | 1477 | | |
| Adj Flow Rate, veh/h | 0 | 504 | 0 | 0 | 1154 | 249 | 92 | 92 | 156 | | |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | | |
| Percent Heavy Veh, % | 0 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | | |
| Cap, veh/h | 0 | 2010 | | 0 | 2154 | 961 | 205 | 205 | 183 | | |
| Arrive On Green | 0.00 | 0.51 | 0.00 | 0.00 | 0.51 | 0.51 | 0.15 | 0.15 | 0.15 | | |
| Sat Flow, veh/h | 0 | 2687 | 1168 | 0 | 2879 | 1251 | 1406 | 1406 | 1251 | | |
| Grp Volume(v), veh/h | 0 | 504 | 0 | 0 | 1154 | 249 | 92 | 92 | 156 | | |
| Grp Sat Flow(s),veh/h/ln | 0 | 1309 | 1168 | 0 | 1403 | 1251 | 1406 | 1406 | 1251 | | |
| Q Serve(g_s), s | 0.0 | 14.1 | 0.0 | 0.0 | 36.2 | 14.7 | 7.8 | 7.8 | 15.8 | | |
| Cycle Q Clear(g_c), s | 0.0 | 14.1 | 0.0 | 0.0 | 36.2 | 14.7 | 7.8 | 7.8 | 15.8 | | |
| Prop In Lane | 0.00 | | 1.00 | 0.00 | | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 0 | 2010 | | 0 | 2154 | 961 | 205 | 205 | 183 | | |
| V/C Ratio(X) | 0.00 | 0.25 | | 0.00 | 0.54 | 0.26 | 0.45 | 0.45 | 0.85 | | |
| Avail Cap(c_a), veh/h | 0 | 2010 | | 0 | 2154 | 961 | 355 | 355 | 316 | | |
| HCM Platoon Ratio | 1.00 | 0.66 | 0.66 | 1.00 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 0.00 | 0.85 | 0.00 | 0.00 | 0.80 | 0.80 | 1.00 | 1.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 0.0 | 10.9 | 0.0 | 0.0 | 16.4 | 11.1 | 50.7 | 50.7 | 54.1 | | |
| Incr Delay (d2), s/veh | 0.0 | 0.3 | 0.0 | 0.0 | 0.8 | 0.5 | 1.5 | 1.5 | 10.7 | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| %ile BackOfQ(50%),veh/ln | 0.0 | 4.6 | 0.0 | 0.0 | 12.6 | 13.5 | 2.9 | 2.9 | 5.6 | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 11.2 | 0.0 | 0.0 | 17.1 | 11.6 | 52.2 | 52.2 | 64.8 | | |
| LnGrp LOS | A | B | | A | B | B | D | D | E | | |
| Approach Vol, veh/h | | 504 | A | | 1403 | | 248 | 248 | | | |
| Approach Delay, s/veh | | 11.2 | | | 16.2 | | 60.1 | 60.1 | | | |
| Approach LOS | | B | | | B | | E | E | | | |

| Timer - Assigned Phs | 2 | 4 | 6 |
|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 105.8 | 24.2 | 105.8 |
| Change Period (Y+Rc), s | * 6 | * 5.2 | * 6 |
| Max Green Setting (Gmax), s | * 86 | * 33 | * 86 |
| Max Q Clear Time (g_c+I1), s | 0.0 | 17.8 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 1.2 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 20.1 |
| HCM 6th LOS | C |

**Notes**

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 41 | 471 | 0 | 0 | 926 | 34 | 248 | 0 | 69 | 0 | 0 | 0 |
| Future Volume (veh/h) | 41 | 471 | 0 | 0 | 926 | 34 | 248 | 0 | 69 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1105 | 1356 | 0 | 0 | 1465 | 1360 | 1477 | 1500 | 1453 | | | |
| Adj Flow Rate, veh/h | 47 | 541 | 0 | 0 | 1064 | 39 | 285 | 0 | 79 | | | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | | | |
| Percent Heavy Veh, % | 27 | 4 | 0 | 0 | 3 | 12 | 2 | 0 | 4 | | | |
| Cap, veh/h | 229 | 1269 | 0 | 0 | 1370 | 567 | 360 | 0 | 158 | | | |
| Arrive On Green | 0.00 | 0.82 | 0.00 | 0.00 | 0.82 | 0.82 | 0.13 | 0.00 | 0.13 | | | |
| Sat Flow, veh/h | 1053 | 2645 | 0 | 0 | 2857 | 1152 | 2813 | 0 | 1232 | | | |
| Grp Volume(v), veh/h | 47 | 541 | 0 | 0 | 1064 | 39 | 285 | 0 | 79 | | | |
| Grp Sat Flow(s),veh/h/ln | 1053 | 1289 | 0 | 0 | 1392 | 1152 | 1406 | 0 | 1232 | | | |
| Q Serve(g_s), s | 0.1 | 7.7 | 0.0 | 0.0 | 24.9 | 0.9 | 12.8 | 0.0 | 7.8 | | | |
| Cycle Q Clear(g_c), s | 0.1 | 7.7 | 0.0 | 0.0 | 24.9 | 0.9 | 12.8 | 0.0 | 7.8 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 229 | 1269 | 0 | 0 | 1370 | 567 | 360 | 0 | 158 | | | |
| V/C Ratio(X) | 0.21 | 0.43 | 0.00 | 0.00 | 0.78 | 0.07 | 0.79 | 0.00 | 0.50 | | | |
| Avail Cap(c_a), veh/h | 317 | 1566 | 0 | 0 | 1370 | 567 | 861 | 0 | 377 | | | |
| HCM Platoon Ratio | 1.66 | 1.66 | 1.00 | 1.00 | 1.66 | 1.66 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 0.96 | 0.96 | 0.00 | 0.00 | 0.87 | 0.87 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 34.0 | 6.7 | 0.0 | 0.0 | 8.3 | 6.1 | 55.0 | 0.0 | 52.8 | | | |
| Incr Delay (d2), s/veh | 0.3 | 0.2 | 0.0 | 0.0 | 3.8 | 0.2 | 3.0 | 0.0 | 1.8 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 1.1 | 1.6 | 0.0 | 0.0 | 4.1 | 0.2 | 4.7 | 0.0 | 2.5 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 34.3 | 6.9 | 0.0 | 0.0 | 12.1 | 6.3 | 58.0 | 0.0 | 54.6 | | | |
| LnGrp LOS | C | A | A | A | B | A | E | A | D | | | |
| Approach Vol, veh/h | | 588 | | | 1103 | | | 364 | | | | |
| Approach Delay, s/veh | | 9.1 | | | 11.9 | | | 57.2 | | | | |
| Approach LOS | | A | | | B | | | E | | | | |
| Timer - Assigned Phs | | 2 | | | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 70.0 | | | 0.0 | 70.0 | | 21.8 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | | 4.0 | 6.0 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | | 79.0 | | | 11.0 | 64.0 | | 39.8 | | | | |
| Max Q Clear Time (g_c+I1), s | | 0.0 | | | 0.0 | 0.0 | | 14.8 | | | | |
| Green Ext Time (p_c), s | | 0.0 | | | 0.0 | 0.0 | | 1.8 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 19.1 |
| HCM 6th LOS | B |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 112 | 294 | 84 | 332 | 646 | 81 | 86 | 42 | 101 | 68 | 160 | 33 |
| Future Volume (veh/h) | 112 | 294 | 84 | 332 | 646 | 81 | 86 | 42 | 101 | 68 | 160 | 33 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1345 | 1356 | 1345 | 1500 | 1477 | 1453 | 1406 | 1418 | 1430 | 1453 | 1488 | 1465 |
| Adj Flow Rate, veh/h | 126 | 330 | 94 | 373 | 726 | 91 | 97 | 47 | 113 | 76 | 180 | 37 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Percent Heavy Veh, % | 5 | 4 | 5 | 0 | 2 | 4 | 8 | 7 | 6 | 4 | 1 | 3 |
| Cap, veh/h | 511 | 1238 | 634 | 827 | 1572 | 762 | 188 | 219 | 363 | 364 | 205 | 252 |
| Arrive On Green | 0.04 | 0.32 | 0.32 | 0.14 | 0.56 | 0.56 | 0.08 | 0.15 | 0.15 | 0.06 | 0.14 | 0.14 |
| Sat Flow, veh/h | 1281 | 2577 | 1140 | 1429 | 2806 | 1232 | 1339 | 1418 | 1212 | 1384 | 1488 | 1241 |
| Grp Volume(v), veh/h | 126 | 330 | 94 | 373 | 726 | 91 | 97 | 47 | 113 | 76 | 180 | 37 |
| Grp Sat Flow(s),veh/h/ln | 1281 | 1289 | 1140 | 1429 | 1403 | 1232 | 1339 | 1418 | 1212 | 1384 | 1488 | 1241 |
| Q Serve(g_s), s | 6.4 | 12.4 | 6.6 | 16.5 | 19.9 | 4.0 | 8.0 | 3.8 | 9.4 | 6.1 | 15.4 | 3.2 |
| Cycle Q Clear(g_c), s | 6.4 | 12.4 | 6.6 | 16.5 | 19.9 | 4.0 | 8.0 | 3.8 | 9.4 | 6.1 | 15.4 | 3.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 511 | 1238 | 634 | 827 | 1572 | 762 | 188 | 219 | 363 | 364 | 205 | 252 |
| V/C Ratio(X) | 0.25 | 0.27 | 0.15 | 0.45 | 0.46 | 0.12 | 0.52 | 0.21 | 0.31 | 0.21 | 0.88 | 0.15 |
| Avail Cap(c_a), veh/h | 585 | 1238 | 634 | 851 | 1572 | 762 | 252 | 371 | 492 | 453 | 389 | 405 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.97 | 0.97 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 15.6 | 27.3 | 18.8 | 12.4 | 16.9 | 10.2 | 44.3 | 48.1 | 35.2 | 44.4 | 54.9 | 42.6 |
| Incr Delay (d2), s/veh | 0.2 | 0.5 | 0.5 | 0.3 | 1.0 | 0.3 | 1.6 | 0.4 | 0.4 | 0.2 | 8.6 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.9 | 4.1 | 1.8 | 4.9 | 6.3 | 1.1 | 2.7 | 1.3 | 2.8 | 2.1 | 6.2 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 15.8 | 27.8 | 19.3 | 12.7 | 17.9 | 10.5 | 45.9 | 48.4 | 35.6 | 44.6 | 63.6 | 42.8 |
| LnGrp LOS | B | C | B | B | B | B | D | D | D | D | E | D |
| Approach Vol, veh/h | | 550 | | | 1190 | | | 257 | | | 293 | |
| Approach Delay, s/veh | | 23.6 | | | 15.7 | | | 41.8 | | | 56.0 | |
| Approach LOS | | C | | | B | | | D | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.8 | 69.5 | 13.8 | 23.9 | 12.4 | 79.9 | 11.6 | 26.1 |
| Change Period (Y+Rc), s | 4.0 | * 7 | 4.0 | 6.0 | 4.0 | * 7 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 21.0 | * 38 | 16.0 | 34.0 | 16.0 | * 43 | 16.0 | 34.0 |
| Max Q Clear Time (g_c+I1), s | 8.5 | 14.4 | 10.0 | 17.4 | 8.4 | 21.9 | 8.1 | 11.4 |
| Green Ext Time (p_c), s | 0.3 | 1.4 | 0.1 | 0.5 | 0.2 | 2.9 | 0.1 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 25.7 |
| HCM 6th LOS | C |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

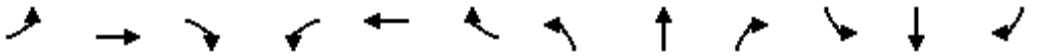
| Intersection | |
|---|---|
| Int Delay, s/veh | 11.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↰ | ↱ | | ↕ | |
| Traffic Vol, veh/h | 1 | 7 | 3 | 308 | 4 | 13 | 1 | 14 | 485 | 12 | 28 | 0 |
| Future Vol, veh/h | 1 | 7 | 3 | 308 | 4 | 13 | 1 | 14 | 485 | 12 | 28 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | 100 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 84 | 84 | 84 | 84 | 84 | 84 | 84 | 84 | 84 | 84 | 84 | 84 |
| Heavy Vehicles, % | 0 | 14 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Mvmt Flow | 1 | 8 | 4 | 367 | 5 | 15 | 1 | 17 | 577 | 14 | 33 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 20 | 0 | 0 | 12 | 0 | 0 | 775 | 766 | 10 | 768 | 761 | 13 |
| Stage 1 | - | - | - | - | - | - | 12 | 12 | - | 747 | 747 | - |
| Stage 2 | - | - | - | - | - | - | 763 | 754 | - | 21 | 14 | - |
| Critical Hdwy | 4.1 | - | - | 4.12 | - | - | 7.1 | 6.5 | 6.21 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.218 | - | - | 3.5 | 4 | 3.309 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1609 | - | - | 1607 | - | - | 318 | 335 | 1074 | 321 | 337 | 1073 |
| Stage 1 | - | - | - | - | - | - | 1014 | 890 | - | 408 | 423 | - |
| Stage 2 | - | - | - | - | - | - | 400 | 420 | - | 1003 | 888 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1609 | - | - | 1607 | - | - | 237 | 257 | 1074 | 116 | 259 | 1073 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 237 | 257 | - | 116 | 259 | - |
| Stage 1 | - | - | - | - | - | - | 1013 | 889 | - | 408 | 325 | - |
| Stage 2 | - | - | - | - | - | - | 276 | 323 | - | 455 | 887 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.7 | 7.5 | 12.4 | 30.3 |
| HCM LOS | | | B | D |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 256 | 1074 | 1609 | - | - | 1607 | - | - | 189 |
| HCM Lane V/C Ratio | 0.07 | 0.538 | 0.001 | - | - | 0.228 | - | - | 0.252 |
| HCM Control Delay (s) | 20.1 | 12.2 | 7.2 | 0 | - | 7.9 | 0 | - | 30.3 |
| HCM Lane LOS | C | B | A | A | - | A | A | - | D |
| HCM 95th %tile Q(veh) | 0.2 | 3.3 | 0 | - | - | 0.9 | - | - | 1 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 182 | 309 | 7 | 102 | 255 | 153 | 5 | 66 | 149 | 106 | 35 | 74 |
| Future Volume (veh/h) | 182 | 309 | 7 | 102 | 255 | 153 | 5 | 66 | 149 | 106 | 35 | 74 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1339 | 1339 | 1339 | 1500 | 1465 | 1465 | 1500 | 1500 | 1500 | 1465 | 1465 | 1465 |
| Adj Flow Rate, veh/h | 207 | 351 | 8 | 116 | 290 | 174 | 6 | 75 | 169 | 120 | 40 | 84 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 1 | 1 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 3 | 3 | 3 |
| Cap, veh/h | 335 | 655 | 15 | 405 | 402 | 241 | 271 | 82 | 184 | 192 | 115 | 242 |
| Arrive On Green | 0.09 | 0.50 | 0.50 | 0.08 | 0.62 | 0.62 | 0.01 | 0.20 | 0.20 | 0.08 | 0.27 | 0.27 |
| Sat Flow, veh/h | 1276 | 1304 | 30 | 1429 | 858 | 515 | 1429 | 410 | 924 | 1395 | 421 | 884 |
| Grp Volume(v), veh/h | 207 | 0 | 359 | 116 | 0 | 464 | 6 | 0 | 244 | 120 | 0 | 124 |
| Grp Sat Flow(s),veh/h/ln | 1276 | 0 | 1334 | 1429 | 0 | 1372 | 1429 | 0 | 1334 | 1395 | 0 | 1306 |
| Q Serve(g_s), s | 9.8 | 0.0 | 22.0 | 5.1 | 0.0 | 27.8 | 0.4 | 0.0 | 21.5 | 7.9 | 0.0 | 9.1 |
| Cycle Q Clear(g_c), s | 9.8 | 0.0 | 22.0 | 5.1 | 0.0 | 27.8 | 0.4 | 0.0 | 21.5 | 7.9 | 0.0 | 9.1 |
| Prop In Lane | 1.00 | | 0.02 | 1.00 | | 0.38 | 1.00 | | 0.69 | 1.00 | | 0.68 |
| Lane Grp Cap(c), veh/h | 335 | 0 | 670 | 405 | 0 | 643 | 271 | 0 | 266 | 192 | 0 | 357 |
| V/C Ratio(X) | 0.62 | 0.00 | 0.54 | 0.29 | 0.00 | 0.72 | 0.02 | 0.00 | 0.92 | 0.63 | 0.00 | 0.35 |
| Avail Cap(c_a), veh/h | 335 | 0 | 670 | 453 | 0 | 643 | 392 | 0 | 300 | 206 | 0 | 357 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 0.85 | 0.00 | 0.85 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.2 | 0.0 | 20.3 | 15.8 | 0.0 | 17.2 | 37.9 | 0.0 | 47.0 | 35.0 | 0.0 | 35.0 |
| Incr Delay (d2), s/veh | 3.4 | 0.0 | 3.1 | 0.3 | 0.0 | 5.9 | 0.0 | 0.0 | 29.3 | 5.2 | 0.0 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.0 | 0.0 | 7.1 | 1.6 | 0.0 | 7.9 | 0.1 | 0.0 | 9.3 | 2.9 | 0.0 | 2.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 21.6 | 0.0 | 23.4 | 16.2 | 0.0 | 23.1 | 37.9 | 0.0 | 76.4 | 40.2 | 0.0 | 35.6 |
| LnGrp LOS | C | A | C | B | A | C | D | A | E | D | A | D |
| Approach Vol, veh/h | | 566 | | | 580 | | | 250 | | | 244 | |
| Approach Delay, s/veh | | 22.7 | | | 21.7 | | | 75.4 | | | 37.9 | |
| Approach LOS | | C | | | C | | | E | | | D | |

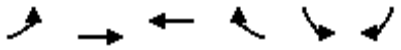
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.0 | 66.3 | 4.9 | 37.8 | 15.0 | 62.3 | 13.8 | 29.0 |
| Change Period (Y+Rc), s | 4.0 | 6.0 | 4.0 | 5.0 | 4.0 | 6.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 11.0 | 52.0 | 11.0 | 27.0 | 11.0 | 52.0 | 11.0 | 27.0 |
| Max Q Clear Time (g_c+I1), s | 7.1 | 24.0 | 2.4 | 11.1 | 11.8 | 29.8 | 9.9 | 23.5 |
| Green Ext Time (p_c), s | 0.1 | 2.1 | 0.0 | 0.5 | 0.0 | 2.8 | 0.0 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 32.7 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 20 | 468 | 87 | 246 | 397 | 58 | 98 | 66 | 293 | 43 | 35 | 14 |
| Future Volume (veh/h) | 20 | 468 | 87 | 246 | 397 | 58 | 98 | 66 | 293 | 43 | 35 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1350 | 1339 | 1350 | 1500 | 1477 | 1477 | 1500 | 1477 | 1488 | 1500 | 1465 | 1465 |
| Adj Flow Rate, veh/h | 23 | 538 | 100 | 283 | 456 | 67 | 113 | 76 | 337 | 49 | 40 | 16 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 2 | 1 | 0 | 3 | 3 |
| Cap, veh/h | 304 | 694 | 592 | 332 | 825 | 121 | 300 | 373 | 450 | 226 | 252 | 101 |
| Arrive On Green | 0.52 | 0.52 | 0.52 | 0.07 | 0.43 | 0.43 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 635 | 1339 | 1144 | 1429 | 1258 | 185 | 1081 | 1477 | 1261 | 780 | 995 | 398 |
| Grp Volume(v), veh/h | 23 | 538 | 100 | 283 | 0 | 523 | 113 | 76 | 337 | 49 | 0 | 56 |
| Grp Sat Flow(s),veh/h/ln | 635 | 1339 | 1144 | 1429 | 0 | 1443 | 1081 | 1477 | 1261 | 780 | 0 | 1393 |
| Q Serve(g_s), s | 2.8 | 38.8 | 5.5 | 10.3 | 0.0 | 32.4 | 10.9 | 4.9 | 28.1 | 6.3 | 0.0 | 3.8 |
| Cycle Q Clear(g_c), s | 18.7 | 38.8 | 5.5 | 10.3 | 0.0 | 32.4 | 14.7 | 4.9 | 28.1 | 11.2 | 0.0 | 3.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.13 | 1.00 | | 1.00 | 1.00 | | 0.29 |
| Lane Grp Cap(c), veh/h | 304 | 694 | 592 | 332 | 0 | 946 | 300 | 373 | 450 | 226 | 0 | 352 |
| V/C Ratio(X) | 0.08 | 0.78 | 0.17 | 0.85 | 0.00 | 0.55 | 0.38 | 0.20 | 0.75 | 0.22 | 0.00 | 0.16 |
| Avail Cap(c_a), veh/h | 304 | 694 | 592 | 362 | 0 | 946 | 305 | 381 | 457 | 230 | 0 | 360 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.83 | 0.83 | 0.83 | 0.68 | 0.00 | 0.68 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.5 | 23.3 | 15.3 | 22.8 | 0.0 | 20.9 | 40.6 | 35.3 | 33.8 | 39.7 | 0.0 | 34.9 |
| Incr Delay (d2), s/veh | 0.4 | 7.0 | 0.5 | 11.9 | 0.0 | 1.6 | 0.8 | 0.3 | 6.6 | 0.5 | 0.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 13.0 | 1.5 | 5.4 | 0.0 | 12.0 | 2.9 | 1.8 | 9.2 | 1.3 | 0.0 | 1.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.9 | 30.3 | 15.8 | 34.7 | 0.0 | 22.5 | 41.4 | 35.6 | 40.4 | 40.2 | 0.0 | 35.1 |
| LnGrp LOS | C | C | B | C | A | C | D | D | D | D | A | D |
| Approach Vol, veh/h | | 661 | | | 806 | | | 526 | | | 105 | |
| Approach Delay, s/veh | | 27.9 | | | 26.8 | | | 39.9 | | | 37.5 | |
| Approach LOS | | C | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 16.5 | 68.1 | | 35.4 | | 84.6 | | 35.4 | | | | |
| Change Period (Y+Rc), s | 4.0 | 6.0 | | 5.0 | | 6.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 59.0 | | 31.0 | | 78.0 | | 31.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 12.3 | 40.8 | | 13.2 | | 34.4 | | 30.1 | | | | |
| Green Ext Time (p_c), s | 0.2 | 3.7 | | 0.5 | | 3.7 | | 0.2 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 31.0 |
| HCM 6th LOS | C |



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 10 | 791 | 674 | 54 | 74 | 15 |
| Future Volume (veh/h) | 10 | 791 | 674 | 54 | 74 | 15 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | | 1.00 | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | No | | No | |
| Adj Sat Flow, veh/h/ln | 1350 | 1339 | 1488 | 1488 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 11 | 869 | 741 | 59 | 81 | 16 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Percent Heavy Veh, % | 0 | 1 | 1 | 1 | 0 | 0 |
| Cap, veh/h | 361 | 1104 | 1122 | 89 | 97 | 19 |
| Arrive On Green | 0.82 | 0.82 | 0.82 | 0.82 | 0.08 | 0.08 |
| Sat Flow, veh/h | 491 | 1339 | 1360 | 108 | 1158 | 229 |
| Grp Volume(v), veh/h | 11 | 869 | 0 | 800 | 98 | 0 |
| Grp Sat Flow(s),veh/h/ln | 491 | 1339 | 0 | 1469 | 1401 | 0 |
| Q Serve(g_s), s | 1.1 | 38.9 | 0.0 | 25.2 | 8.3 | 0.0 |
| Cycle Q Clear(g_c), s | 26.3 | 38.9 | 0.0 | 25.2 | 8.3 | 0.0 |
| Prop In Lane | 1.00 | | | 0.07 | 0.83 | 0.16 |
| Lane Grp Cap(c), veh/h | 361 | 1104 | 0 | 1211 | 118 | 0 |
| V/C Ratio(X) | 0.03 | 0.79 | 0.00 | 0.66 | 0.83 | 0.00 |
| Avail Cap(c_a), veh/h | 361 | 1104 | 0 | 1211 | 315 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.75 | 0.75 | 0.00 | 0.41 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 9.1 | 5.3 | 0.0 | 4.1 | 54.1 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 4.3 | 0.0 | 1.2 | 14.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 8.1 | 0.0 | 6.0 | 3.4 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 9.2 | 9.6 | 0.0 | 5.2 | 68.1 | 0.0 |
| LnGrp LOS | A | A | A | A | E | A |
| Approach Vol, veh/h | | 880 | 800 | | 98 | |
| Approach Delay, s/veh | | 9.6 | 5.2 | | 68.1 | |
| Approach LOS | | A | A | | E | |

| Timer - Assigned Phs | 2 | | 4 | | 6 |
|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 104.9 | | 15.1 | | 104.9 |
| Change Period (Y+Rc), s | 6.0 | | 5.0 | | 6.0 |
| Max Green Setting (Gmax), s | 82.0 | | 27.0 | | 82.0 |
| Max Q Clear Time (g_c+I1), s | 40.9 | | 10.3 | | 27.2 |
| Green Ext Time (p_c), s | 8.1 | | 0.2 | | 8.1 |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | 10.9 | |
| HCM 6th LOS | B | |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 145 | 664 | 57 | 31 | 540 | 83 | 84 | 54 | 67 | 114 | 38 | 104 |
| Future Volume (veh/h) | 145 | 664 | 57 | 31 | 540 | 83 | 84 | 54 | 67 | 114 | 38 | 104 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1350 | 1329 | 1329 | 1500 | 1477 | 1477 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 163 | 746 | 64 | 35 | 607 | 93 | 94 | 61 | 75 | 128 | 43 | 117 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Percent Heavy Veh, % | 0 | 2 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 230 | 728 | 62 | 101 | 706 | 108 | 181 | 72 | 89 | 211 | 49 | 134 |
| Arrive On Green | 0.04 | 0.40 | 0.40 | 0.03 | 0.56 | 0.56 | 0.07 | 0.12 | 0.12 | 0.09 | 0.14 | 0.14 |
| Sat Flow, veh/h | 1286 | 1207 | 104 | 1429 | 1251 | 192 | 1429 | 612 | 753 | 1429 | 356 | 969 |
| Grp Volume(v), veh/h | 163 | 0 | 810 | 35 | 0 | 700 | 94 | 0 | 136 | 128 | 0 | 160 |
| Grp Sat Flow(s),veh/h/ln | 1286 | 0 | 1310 | 1429 | 0 | 1442 | 1429 | 0 | 1365 | 1429 | 0 | 1326 |
| Q Serve(g_s), s | 6.0 | 0.0 | 72.4 | 1.2 | 0.0 | 49.2 | 6.9 | 0.0 | 11.7 | 9.3 | 0.0 | 14.2 |
| Cycle Q Clear(g_c), s | 6.0 | 0.0 | 72.4 | 1.2 | 0.0 | 49.2 | 6.9 | 0.0 | 11.7 | 9.3 | 0.0 | 14.2 |
| Prop In Lane | 1.00 | | 0.08 | 1.00 | | 0.13 | 1.00 | | 0.55 | 1.00 | | 0.73 |
| Lane Grp Cap(c), veh/h | 230 | 0 | 791 | 101 | 0 | 815 | 181 | 0 | 161 | 211 | 0 | 184 |
| V/C Ratio(X) | 0.71 | 0.00 | 1.02 | 0.35 | 0.00 | 0.86 | 0.52 | 0.00 | 0.84 | 0.61 | 0.00 | 0.87 |
| Avail Cap(c_a), veh/h | 261 | 0 | 791 | 191 | 0 | 815 | 211 | 0 | 284 | 211 | 0 | 276 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.51 | 0.00 | 0.51 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.7 | 0.0 | 36.1 | 29.3 | 0.0 | 22.1 | 42.9 | 0.0 | 51.8 | 41.5 | 0.0 | 50.6 |
| Incr Delay (d2), s/veh | 3.9 | 0.0 | 29.3 | 2.0 | 0.0 | 11.4 | 2.3 | 0.0 | 8.7 | 4.9 | 0.0 | 15.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.0 | 0.0 | 30.5 | 0.6 | 0.0 | 18.4 | 2.6 | 0.0 | 4.4 | 3.6 | 0.0 | 5.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 28.6 | 0.0 | 65.4 | 31.3 | 0.0 | 33.5 | 45.2 | 0.0 | 60.5 | 46.3 | 0.0 | 65.9 |
| LnGrp LOS | C | A | F | C | A | C | D | A | E | D | A | E |
| Approach Vol, veh/h | | 973 | | | 735 | | | 230 | | | 288 | |
| Approach Delay, s/veh | | 59.3 | | | 33.4 | | | 54.3 | | | 57.2 | |
| Approach LOS | | E | | | C | | | D | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 7.4 | 78.4 | 12.5 | 21.6 | 12.1 | 73.8 | 15.0 | 19.2 |
| Change Period (Y+Rc), s | 4.0 | 6.0 | 4.0 | 5.0 | 4.0 | 6.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 1.0 | 54.0 | 11.0 | 25.0 | 11.0 | 54.0 | 11.0 | 25.0 |
| Max Q Clear Time (g_c+I1), s | 3.2 | 74.4 | 8.9 | 16.2 | 8.0 | 51.2 | 11.3 | 13.7 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 0.5 | 0.1 | 1.3 | 0.0 | 0.4 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 49.9 |
| HCM 6th LOS | D |

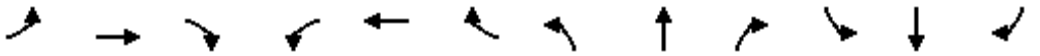
| Intersection | |
|---|---|
| Int Delay, s/veh | 8.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 10 | 820 | 42 | 43 | 651 | 15 | 20 | 5 | 81 | 5 | 15 | 10 |
| Future Vol, veh/h | 10 | 820 | 42 | 43 | 651 | 15 | 20 | 5 | 81 | 5 | 15 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 500 | - | - | 500 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Mvmt Flow | 11 | 932 | 48 | 49 | 740 | 17 | 23 | 6 | 92 | 6 | 17 | 11 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 757 | 0 | 0 | 980 | 0 | 0 | 1839 | 1833 | 956 | 1874 | 1849 | 749 |
| Stage 1 | - | - | - | - | - | - | 978 | 978 | - | 847 | 847 | - |
| Stage 2 | - | - | - | - | - | - | 861 | 855 | - | 1027 | 1002 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.21 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.309 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 863 | - | - | 712 | - | - | 59 | 77 | 314 | 55 | 75 | 415 |
| Stage 1 | - | - | - | - | - | - | 304 | 331 | - | 359 | 381 | - |
| Stage 2 | - | - | - | - | - | - | 353 | 378 | - | 285 | 323 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 863 | - | - | 712 | - | - | 44 | 71 | 314 | 34 | 69 | 415 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 44 | 71 | - | 34 | 69 | - |
| Stage 1 | - | - | - | - | - | - | 300 | 327 | - | 354 | 355 | - |
| Stage 2 | - | - | - | - | - | - | 304 | 352 | - | 195 | 319 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.6 | 113.7 | 84.6 |
| HCM LOS | | | F | F |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 135 | 863 | - | - | 712 | - | - | 77 |
| HCM Lane V/C Ratio | 0.892 | 0.013 | - | - | 0.069 | - | - | 0.443 |
| HCM Control Delay (s) | 113.7 | 9.2 | - | - | 10.4 | - | - | 84.6 |
| HCM Lane LOS | F | A | - | - | B | - | - | F |
| HCM 95th %tile Q(veh) | 5.9 | 0 | - | - | 0.2 | - | - | 1.8 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 169 | 546 | 126 | 220 | 431 | 302 | 165 | 519 | 202 | 271 | 411 | 78 |
| Future Volume (veh/h) | 169 | 546 | 126 | 220 | 431 | 302 | 165 | 519 | 202 | 271 | 411 | 78 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1350 | 1329 | 1350 | 1488 | 1477 | 1477 | 1488 | 1500 | 1500 | 1477 | 1488 | 1488 |
| Adj Flow Rate, veh/h | 180 | 581 | 134 | 234 | 459 | 321 | 176 | 552 | 215 | 288 | 437 | 83 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 2 | 0 | 1 | 2 | 2 | 1 | 0 | 0 | 2 | 1 | 1 |
| Cap, veh/h | 197 | 822 | 487 | 273 | 481 | 574 | 313 | 841 | 502 | 305 | 780 | 147 |
| Arrive On Green | 0.11 | 0.33 | 0.33 | 0.13 | 0.43 | 0.43 | 0.10 | 0.30 | 0.30 | 0.13 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1286 | 2525 | 1144 | 2750 | 1477 | 1251 | 1417 | 2850 | 1271 | 1406 | 2374 | 448 |
| Grp Volume(v), veh/h | 180 | 581 | 134 | 234 | 459 | 321 | 176 | 552 | 215 | 288 | 259 | 261 |
| Grp Sat Flow(s),veh/h/ln | 1286 | 1262 | 1144 | 1375 | 1477 | 1251 | 1417 | 1425 | 1271 | 1406 | 1414 | 1408 |
| Q Serve(g_s), s | 13.9 | 30.2 | 11.4 | 12.5 | 45.1 | 26.6 | 12.9 | 25.4 | 18.5 | 20.0 | 22.6 | 22.9 |
| Cycle Q Clear(g_c), s | 13.9 | 30.2 | 11.4 | 12.5 | 45.1 | 26.6 | 12.9 | 25.4 | 18.5 | 20.0 | 22.6 | 22.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 197 | 822 | 487 | 273 | 481 | 574 | 313 | 841 | 502 | 305 | 465 | 462 |
| V/C Ratio(X) | 0.92 | 0.71 | 0.28 | 0.86 | 0.95 | 0.56 | 0.56 | 0.66 | 0.43 | 0.94 | 0.56 | 0.56 |
| Avail Cap(c_a), veh/h | 198 | 822 | 487 | 458 | 527 | 613 | 360 | 841 | 502 | 305 | 465 | 462 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 36.0 | 44.3 | 28.0 | 64.0 | 41.5 | 24.5 | 32.8 | 46.2 | 33.1 | 36.1 | 41.4 | 41.5 |
| Incr Delay (d2), s/veh | 40.6 | 2.6 | 0.2 | 4.3 | 20.4 | 0.5 | 1.2 | 4.0 | 2.7 | 36.6 | 4.8 | 4.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.5 | 9.7 | 3.2 | 4.4 | 17.7 | 7.2 | 4.5 | 9.4 | 6.0 | 10.3 | 8.4 | 8.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 76.6 | 47.0 | 28.3 | 68.4 | 61.9 | 25.0 | 33.9 | 50.2 | 35.8 | 72.7 | 46.2 | 46.4 |
| LnGrp LOS | E | D | C | E | E | C | C | D | D | E | D | D |
| Approach Vol, veh/h | | 895 | | | 1014 | | | 943 | | | 808 | |
| Approach Delay, s/veh | | 50.1 | | | 51.7 | | | 43.9 | | | 55.7 | |
| Approach LOS | | D | | | D | | | D | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 24.0 | 50.8 | 19.9 | 55.3 | 19.0 | 55.8 | 19.9 | 55.3 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 5.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 20.0 | 39.5 | 25.0 | 43.5 | 20.0 | 39.5 | 16.0 | 53.5 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 27.4 | 14.5 | 32.2 | 14.9 | 24.9 | 15.9 | 47.1 |
| Green Ext Time (p_c), s | 0.0 | 2.8 | 0.4 | 2.7 | 0.1 | 2.0 | 0.0 | 1.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 50.2 |
| HCM 6th LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 98 | 888 | 85 | 128 | 834 | 181 | 80 | 62 | 196 | 247 | 70 | 83 |
| Future Volume (veh/h) | 98 | 888 | 85 | 128 | 834 | 181 | 80 | 62 | 196 | 247 | 70 | 83 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1318 | 1329 | 1339 | 1477 | 1488 | 1488 | 1477 | 1500 | 1500 | 1488 | 1500 | 1477 |
| Adj Flow Rate, veh/h | 108 | 976 | 93 | 141 | 916 | 199 | 88 | 68 | 215 | 271 | 77 | 91 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Percent Heavy Veh, % | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 2 |
| Cap, veh/h | 161 | 1196 | 538 | 188 | 1113 | 242 | 352 | 527 | 446 | 327 | 527 | 439 |
| Arrive On Green | 0.04 | 0.31 | 0.31 | 0.04 | 0.32 | 0.32 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| Sat Flow, veh/h | 1256 | 2525 | 1135 | 1406 | 2310 | 502 | 961 | 1500 | 1271 | 872 | 1500 | 1251 |
| Grp Volume(v), veh/h | 108 | 976 | 93 | 141 | 560 | 555 | 88 | 68 | 215 | 271 | 77 | 91 |
| Grp Sat Flow(s),veh/h/ln | 1256 | 1262 | 1135 | 1406 | 1414 | 1398 | 961 | 1500 | 1271 | 872 | 1500 | 1251 |
| Q Serve(g_s), s | 6.5 | 53.5 | 8.9 | 7.6 | 54.9 | 55.0 | 10.3 | 4.6 | 19.8 | 46.0 | 5.3 | 7.6 |
| Cycle Q Clear(g_c), s | 6.5 | 53.5 | 8.9 | 7.6 | 54.9 | 55.0 | 15.6 | 4.6 | 19.8 | 50.6 | 5.3 | 7.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.36 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 161 | 1196 | 538 | 188 | 681 | 673 | 352 | 527 | 446 | 327 | 527 | 439 |
| V/C Ratio(X) | 0.67 | 0.82 | 0.17 | 0.75 | 0.82 | 0.82 | 0.25 | 0.13 | 0.48 | 0.83 | 0.15 | 0.21 |
| Avail Cap(c_a), veh/h | 265 | 1196 | 538 | 294 | 681 | 673 | 354 | 530 | 449 | 329 | 530 | 442 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.66 | 0.66 | 0.66 | 0.87 | 0.87 | 0.87 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 32.3 | 45.5 | 30.2 | 32.3 | 45.2 | 45.3 | 38.6 | 33.1 | 38.0 | 50.3 | 33.3 | 34.1 |
| Incr Delay (d2), s/veh | 2.4 | 4.2 | 0.5 | 3.8 | 9.5 | 9.7 | 0.3 | 0.1 | 0.6 | 15.5 | 0.1 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.1 | 18.0 | 2.6 | 2.8 | 21.7 | 21.5 | 2.5 | 1.7 | 6.4 | 11.5 | 2.0 | 2.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 34.7 | 49.7 | 30.7 | 36.2 | 54.8 | 55.0 | 38.9 | 33.2 | 38.6 | 65.7 | 33.4 | 34.2 |
| LnGrp LOS | C | D | C | D | D | D | D | C | D | E | C | C |
| Approach Vol, veh/h | | 1177 | | | 1256 | | | 371 | | | 439 | |
| Approach Delay, s/veh | | 46.8 | | | 52.8 | | | 37.7 | | | 53.5 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.8 | 77.6 | | 58.7 | 12.6 | 78.7 | | 58.7 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | | 6.0 | 4.0 | 6.5 | | 6.0 |
| Max Green Setting (Gmax), s | 21.0 | 59.5 | | 53.0 | 21.0 | 59.5 | | 53.0 |
| Max Q Clear Time (g_c+I1), s | 9.6 | 55.5 | | 52.6 | 8.5 | 57.0 | | 21.8 |
| Green Ext Time (p_c), s | 0.2 | 2.1 | | 0.1 | 0.1 | 1.4 | | 1.3 |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 49.0 |
| HCM 6th LOS | | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SBL2 | SBL | SBR | NWL | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑ | ↱ | | ↑↑ | ↱ | ↰ | | ↱ | | |
| Traffic Volume (veh/h) | 0 | 975 | 372 | 0 | 1065 | 125 | 66 | 0 | 67 | 0 | 0 |
| Future Volume (veh/h) | 0 | 975 | 372 | 0 | 1065 | 125 | 66 | 0 | 67 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Work Zone On Approach | | No | | | No | | | No | | | |
| Adj Sat Flow, veh/h/ln | 0 | 1339 | 1339 | 0 | 1477 | 1477 | 1231 | 1231 | 1430 | | |
| Adj Flow Rate, veh/h | 0 | 1048 | 0 | 0 | 1145 | 134 | 71 | 71 | 72 | | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | | |
| Percent Heavy Veh, % | 0 | 1 | 1 | 0 | 2 | 2 | 23 | 23 | 6 | | |
| Cap, veh/h | 0 | 2159 | | 0 | 2381 | 1062 | 90 | 90 | 93 | | |
| Arrive On Green | 0.00 | 0.56 | 0.00 | 0.00 | 0.56 | 0.56 | 0.08 | 0.08 | 0.08 | | |
| Sat Flow, veh/h | 0 | 2612 | 1135 | 0 | 2879 | 1251 | 1172 | 1172 | 1212 | | |
| Grp Volume(v), veh/h | 0 | 1048 | 0 | 0 | 1145 | 134 | 71 | 71 | 72 | | |
| Grp Sat Flow(s),veh/h/ln | 0 | 1272 | 1135 | 0 | 1403 | 1251 | 1172 | 1172 | 1212 | | |
| Q Serve(g_s), s | 0.0 | 37.3 | 0.0 | 0.0 | 36.9 | 7.6 | 8.9 | 8.9 | 8.7 | | |
| Cycle Q Clear(g_c), s | 0.0 | 37.3 | 0.0 | 0.0 | 36.9 | 7.6 | 8.9 | 8.9 | 8.7 | | |
| Prop In Lane | 0.00 | | 1.00 | 0.00 | | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 0 | 2159 | | 0 | 2381 | 1062 | 90 | 90 | 93 | | |
| V/C Ratio(X) | 0.00 | 0.49 | | 0.00 | 0.48 | 0.13 | 0.79 | 0.79 | 0.77 | | |
| Avail Cap(c_a), veh/h | 0 | 2159 | | 0 | 2381 | 1062 | 389 | 389 | 402 | | |
| HCM Platoon Ratio | 1.00 | 0.66 | 0.66 | 1.00 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 0.00 | 0.62 | 0.00 | 0.00 | 0.82 | 0.82 | 1.00 | 1.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 0.0 | 13.2 | 0.0 | 0.0 | 13.1 | 6.7 | 68.0 | 68.0 | 68.0 | | |
| Incr Delay (d2), s/veh | 0.0 | 0.5 | 0.0 | 0.0 | 0.6 | 0.2 | 14.0 | 14.0 | 12.7 | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| %ile BackOfQ(50%),veh/ln | 0.0 | 11.8 | 0.0 | 0.0 | 12.9 | 8.1 | 3.1 | 3.1 | 3.1 | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 13.7 | 0.0 | 0.0 | 13.7 | 6.9 | 82.1 | 82.1 | 80.6 | | |
| LnGrp LOS | A | B | | A | B | A | F | F | F | | |
| Approach Vol, veh/h | | 1048 | A | | 1279 | | 143 | 143 | | | |
| Approach Delay, s/veh | | 13.7 | | | 13.0 | | 81.3 | 81.3 | | | |
| Approach LOS | | B | | | B | | F | F | | | |

| Timer - Assigned Phs | 2 | 4 | 6 |
|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 133.3 | 16.7 | 133.3 |
| Change Period (Y+Rc), s | * 6 | * 5.2 | * 6 |
| Max Green Setting (Gmax), s | * 89 | * 50 | * 89 |
| Max Q Clear Time (g_c+I1), s | 0.0 | 10.9 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 0.6 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 17.2 |
| HCM 6th LOS | B |

**Notes**

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 91 | 949 | 0 | 0 | 858 | 87 | 353 | 0 | 128 | 0 | 0 | 0 |
| Future Volume (veh/h) | 91 | 949 | 0 | 0 | 858 | 87 | 353 | 0 | 128 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1339 | 1318 | 0 | 0 | 1477 | 1348 | 1477 | 1500 | 1488 | | | |
| Adj Flow Rate, veh/h | 97 | 1010 | 0 | 0 | 913 | 93 | 376 | 0 | 136 | | | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | | | |
| Percent Heavy Veh, % | 1 | 3 | 0 | 0 | 2 | 13 | 2 | 0 | 1 | | | |
| Cap, veh/h | 376 | 1926 | 0 | 0 | 1985 | 808 | 440 | 0 | 197 | | | |
| Arrive On Green | 0.06 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.16 | 0.00 | 0.16 | | | |
| Sat Flow, veh/h | 1276 | 2571 | 0 | 0 | 2879 | 1142 | 2813 | 0 | 1261 | | | |
| Grp Volume(v), veh/h | 97 | 1010 | 0 | 0 | 913 | 93 | 376 | 0 | 136 | | | |
| Grp Sat Flow(s),veh/h/ln | 1276 | 1252 | 0 | 0 | 1403 | 1142 | 1406 | 0 | 1261 | | | |
| Q Serve(g_s), s | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.5 | 0.0 | 15.3 | | | |
| Cycle Q Clear(g_c), s | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.5 | 0.0 | 15.3 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 376 | 1926 | 0 | 0 | 1985 | 808 | 440 | 0 | 197 | | | |
| V/C Ratio(X) | 0.26 | 0.52 | 0.00 | 0.00 | 0.46 | 0.12 | 0.85 | 0.00 | 0.69 | | | |
| Avail Cap(c_a), veh/h | 536 | 1926 | 0 | 0 | 1985 | 808 | 803 | 0 | 360 | | | |
| HCM Platoon Ratio | 1.66 | 1.66 | 1.00 | 1.00 | 1.66 | 1.66 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 0.85 | 0.85 | 0.00 | 0.00 | 0.71 | 0.71 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 61.6 | 0.0 | 59.8 | | | |
| Incr Delay (d2), s/veh | 0.2 | 0.9 | 0.0 | 0.0 | 0.5 | 0.2 | 3.7 | 0.0 | 3.2 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.7 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 7.3 | 0.0 | 5.1 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 5.0 | 0.9 | 0.0 | 0.0 | 0.5 | 0.2 | 65.3 | 0.0 | 63.0 | | | |
| LnGrp LOS | A | A | A | A | A | A | E | A | E | | | |
| Approach Vol, veh/h | | 1107 | | | 1006 | | | 512 | | | | |
| Approach Delay, s/veh | | 1.2 | | | 0.5 | | | 64.7 | | | | |
| Approach LOS | | A | | | A | | | E | | | | |
| Timer - Assigned Phs | | 2 | | | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 121.3 | | | 9.2 | 112.1 | | 28.7 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | | 4.0 | 6.0 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | | 96.0 | | | 24.0 | 68.0 | | 42.8 | | | | |
| Max Q Clear Time (g_c+I1), s | | 0.0 | | | 5.1 | 0.0 | | 21.5 | | | | |
| Green Ext Time (p_c), s | | 0.0 | | | 0.2 | 0.0 | | 1.9 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 13.3 |
| HCM 6th LOS | B |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 272 | 494 | 123 | 119 | 417 | 67 | 348 | 141 | 184 | 117 | 80 | 28 |
| Future Volume (veh/h) | 272 | 494 | 123 | 119 | 417 | 67 | 348 | 141 | 184 | 117 | 80 | 28 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1339 | 1308 | 1329 | 1406 | 1442 | 1477 | 1488 | 1488 | 1442 | 1500 | 1453 | 1371 |
| Adj Flow Rate, veh/h | 299 | 543 | 135 | 131 | 458 | 74 | 382 | 155 | 202 | 129 | 88 | 31 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Percent Heavy Veh, % | 1 | 4 | 2 | 8 | 5 | 2 | 1 | 1 | 5 | 0 | 4 | 11 |
| Cap, veh/h | 430 | 1310 | 812 | 341 | 1292 | 691 | 337 | 280 | 309 | 224 | 109 | 226 |
| Arrive On Green | 0.08 | 0.35 | 0.35 | 0.06 | 0.47 | 0.47 | 0.19 | 0.19 | 0.19 | 0.08 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1276 | 2485 | 1126 | 1339 | 2739 | 1251 | 1417 | 1488 | 1222 | 1429 | 1453 | 1162 |
| Grp Volume(v), veh/h | 299 | 543 | 135 | 131 | 458 | 74 | 382 | 155 | 202 | 129 | 88 | 31 |
| Grp Sat Flow(s),veh/h/ln | 1276 | 1242 | 1126 | 1339 | 1369 | 1251 | 1417 | 1488 | 1222 | 1429 | 1453 | 1162 |
| Q Serve(g_s), s | 17.2 | 25.0 | 7.5 | 7.5 | 15.9 | 4.2 | 29.0 | 14.2 | 22.2 | 12.0 | 8.9 | 3.3 |
| Cycle Q Clear(g_c), s | 17.2 | 25.0 | 7.5 | 7.5 | 15.9 | 4.2 | 29.0 | 14.2 | 22.2 | 12.0 | 8.9 | 3.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 430 | 1310 | 812 | 341 | 1292 | 691 | 337 | 280 | 309 | 224 | 109 | 226 |
| V/C Ratio(X) | 0.70 | 0.41 | 0.17 | 0.38 | 0.35 | 0.11 | 1.13 | 0.55 | 0.65 | 0.58 | 0.81 | 0.14 |
| Avail Cap(c_a), veh/h | 430 | 1310 | 812 | 415 | 1292 | 691 | 337 | 486 | 478 | 224 | 310 | 387 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.84 | 0.84 | 0.84 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.0 | 31.2 | 9.5 | 19.1 | 25.1 | 16.0 | 52.4 | 55.2 | 50.2 | 58.9 | 68.3 | 50.0 |
| Incr Delay (d2), s/veh | 3.8 | 0.8 | 0.4 | 0.5 | 0.8 | 0.3 | 89.8 | 1.3 | 1.8 | 3.1 | 10.1 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.8 | 8.1 | 1.9 | 2.4 | 5.3 | 1.3 | 9.9 | 5.4 | 6.9 | 4.7 | 3.6 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 21.9 | 32.1 | 9.9 | 19.6 | 25.9 | 16.3 | 142.3 | 56.5 | 51.9 | 62.0 | 78.5 | 50.2 |
| LnGrp LOS | C | C | A | B | C | B | F | E | D | E | E | D |
| Approach Vol, veh/h | | 977 | | | 663 | | | 739 | | | 248 | |
| Approach Delay, s/veh | | 25.9 | | | 23.6 | | | 99.6 | | | 66.4 | |
| Approach LOS | | C | | | C | | | F | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 13.7 | 86.1 | 33.0 | 17.2 | 22.0 | 77.8 | 16.0 | 34.2 |
| Change Period (Y+Rc), s | 4.0 | * 7 | 4.0 | 6.0 | 4.0 | * 7 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 18.0 | * 50 | 29.0 | 32.0 | 18.0 | * 50 | 12.0 | 49.0 |
| Max Q Clear Time (g_c+I1), s | 19.2 | 27.0 | 31.0 | 10.9 | 19.2 | 17.9 | 14.0 | 24.2 |
| Green Ext Time (p_c), s | 0.2 | 2.3 | 0.0 | 0.3 | 0.0 | 1.8 | 0.0 | 1.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 49.9 |
| HCM 6th LOS | D |

**Notes**

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

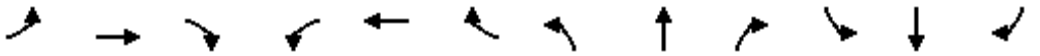
| Intersection | |
|---|---|
| Int Delay, s/veh | 11 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↰ | ↱ | | ↕ | |
| Traffic Vol, veh/h | 1 | 14 | 8 | 403 | 28 | 24 | 6 | 15 | 512 | 16 | 12 | 1 |
| Future Vol, veh/h | 1 | 14 | 8 | 403 | 28 | 24 | 6 | 15 | 512 | 16 | 12 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | 100 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 13 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 1 | 15 | 9 | 438 | 30 | 26 | 7 | 16 | 557 | 17 | 13 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 56 | 0 | 0 | 24 | 0 | 0 | 948 | 954 | 20 | 949 | 945 | 43 |
| Stage 1 | - | - | - | - | - | - | 22 | 22 | - | 919 | 919 | - |
| Stage 2 | - | - | - | - | - | - | 926 | 932 | - | 30 | 26 | - |
| Critical Hdwy | 4.1 | - | - | 4.11 | - | - | 7.1 | 6.63 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.63 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.63 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.209 | - | - | 3.5 | 4.117 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1562 | - | - | 1597 | - | - | 243 | 248 | 1064 | 242 | 264 | 1033 |
| Stage 1 | - | - | - | - | - | - | 1002 | 856 | - | 328 | 353 | - |
| Stage 2 | - | - | - | - | - | - | 325 | 331 | - | 992 | 878 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1562 | - | - | 1597 | - | - | 180 | 177 | 1064 | 84 | 189 | 1033 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 180 | 177 | - | 84 | 189 | - |
| Stage 1 | - | - | - | - | - | - | 1001 | 855 | - | 328 | 253 | - |
| Stage 2 | - | - | - | - | - | - | 220 | 237 | - | 464 | 877 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 7.2 | 12.6 | 48.2 |
| HCM LOS | | | B | E |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 178 | 1064 | 1562 | - | - | 1597 | - | - | 114 |
| HCM Lane V/C Ratio | 0.128 | 0.523 | 0.001 | - | - | 0.274 | - | - | 0.277 |
| HCM Control Delay (s) | 28.2 | 12 | 7.3 | 0 | - | 8.1 | 0 | - | 48.2 |
| HCM Lane LOS | D | B | A | A | - | A | A | - | E |
| HCM 95th %tile Q(veh) | 0.4 | 3.1 | 0 | - | - | 1.1 | - | - | 1 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 187 | 361 | 6 | 85 | 346 | 199 | 3 | 31 | 87 | 114 | 25 | 100 |
| Future Volume (veh/h) | 187 | 361 | 6 | 85 | 346 | 199 | 3 | 31 | 87 | 114 | 25 | 100 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1389 | 1400 | 1400 | 1500 | 1488 | 1488 | 1500 | 1500 | 1500 | 1500 | 1453 | 1453 |
| Adj Flow Rate, veh/h | 199 | 384 | 6 | 90 | 368 | 212 | 3 | 33 | 93 | 121 | 27 | 106 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 | 4 |
| Cap, veh/h | 366 | 822 | 13 | 472 | 498 | 287 | 170 | 40 | 112 | 206 | 51 | 200 |
| Arrive On Green | 0.08 | 0.60 | 0.60 | 0.06 | 0.75 | 0.75 | 0.00 | 0.11 | 0.11 | 0.09 | 0.20 | 0.20 |
| Sat Flow, veh/h | 1323 | 1375 | 21 | 1429 | 886 | 510 | 1429 | 347 | 977 | 1429 | 258 | 1013 |
| Grp Volume(v), veh/h | 199 | 0 | 390 | 90 | 0 | 580 | 3 | 0 | 126 | 121 | 0 | 133 |
| Grp Sat Flow(s),veh/h/ln | 1323 | 0 | 1396 | 1429 | 0 | 1396 | 1429 | 0 | 1324 | 1429 | 0 | 1271 |
| Q Serve(g_s), s | 7.3 | 0.0 | 18.7 | 3.2 | 0.0 | 28.2 | 0.2 | 0.0 | 11.2 | 8.7 | 0.0 | 11.3 |
| Cycle Q Clear(g_c), s | 7.3 | 0.0 | 18.7 | 3.2 | 0.0 | 28.2 | 0.2 | 0.0 | 11.2 | 8.7 | 0.0 | 11.3 |
| Prop In Lane | 1.00 | | 0.02 | 1.00 | | 0.37 | 1.00 | | 0.74 | 1.00 | | 0.80 |
| Lane Grp Cap(c), veh/h | 366 | 0 | 835 | 472 | 0 | 785 | 170 | 0 | 151 | 206 | 0 | 251 |
| V/C Ratio(X) | 0.54 | 0.00 | 0.47 | 0.19 | 0.00 | 0.74 | 0.02 | 0.00 | 0.83 | 0.59 | 0.00 | 0.53 |
| Avail Cap(c_a), veh/h | 384 | 0 | 835 | 543 | 0 | 785 | 296 | 0 | 298 | 212 | 0 | 286 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 0.76 | 0.00 | 0.76 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 13.9 | 0.0 | 13.5 | 10.9 | 0.0 | 10.2 | 46.8 | 0.0 | 52.0 | 40.9 | 0.0 | 43.1 |
| Incr Delay (d2), s/veh | 1.4 | 0.0 | 1.9 | 0.1 | 0.0 | 4.8 | 0.0 | 0.0 | 11.2 | 3.9 | 0.0 | 1.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.0 | 0.0 | 5.9 | 0.9 | 0.0 | 6.2 | 0.1 | 0.0 | 4.2 | 3.2 | 0.0 | 3.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 15.3 | 0.0 | 15.3 | 11.0 | 0.0 | 15.0 | 46.8 | 0.0 | 63.2 | 44.8 | 0.0 | 44.9 |
| LnGrp LOS | B | A | B | B | A | B | D | A | E | D | A | D |
| Approach Vol, veh/h | | 589 | | | 670 | | | 129 | | | 254 | |
| Approach Delay, s/veh | | 15.3 | | | 14.4 | | | 62.8 | | | 44.8 | |
| Approach LOS | | B | | | B | | | E | | | D | |

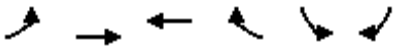
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.0 | 77.8 | 4.5 | 28.7 | 13.4 | 73.4 | 14.5 | 18.7 |
| Change Period (Y+Rc), s | 4.0 | 6.0 | 4.0 | 5.0 | 4.0 | 6.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 11.0 | 52.0 | 11.0 | 27.0 | 11.0 | 52.0 | 11.0 | 27.0 |
| Max Q Clear Time (g_c+I1), s | 5.2 | 20.7 | 2.2 | 13.3 | 9.3 | 30.2 | 10.7 | 13.2 |
| Green Ext Time (p_c), s | 0.1 | 2.3 | 0.0 | 0.5 | 0.1 | 3.8 | 0.0 | 0.5 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.3 |
| HCM 6th LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 9 | 493 | 70 | 216 | 484 | 103 | 146 | 95 | 408 | 53 | 42 | 9 |
| Future Volume (veh/h) | 9 | 493 | 70 | 216 | 484 | 103 | 146 | 95 | 408 | 53 | 42 | 9 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1400 | 1400 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 9 | 508 | 72 | 223 | 499 | 106 | 151 | 98 | 421 | 55 | 43 | 9 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 257 | 745 | 631 | 359 | 780 | 166 | 310 | 388 | 436 | 206 | 311 | 65 |
| Arrive On Green | 0.53 | 0.53 | 0.53 | 0.06 | 0.43 | 0.43 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Sat Flow, veh/h | 610 | 1400 | 1186 | 1429 | 1199 | 255 | 1085 | 1500 | 1271 | 708 | 1203 | 252 |
| Grp Volume(v), veh/h | 9 | 508 | 72 | 223 | 0 | 605 | 151 | 98 | 421 | 55 | 0 | 52 |
| Grp Sat Flow(s),veh/h/ln | 610 | 1400 | 1186 | 1429 | 0 | 1454 | 1085 | 1500 | 1271 | 708 | 0 | 1455 |
| Q Serve(g_s), s | 1.2 | 32.0 | 3.6 | 7.9 | 0.0 | 39.3 | 14.9 | 6.2 | 31.0 | 8.0 | 0.0 | 3.3 |
| Cycle Q Clear(g_c), s | 26.4 | 32.0 | 3.6 | 7.9 | 0.0 | 39.3 | 18.2 | 6.2 | 31.0 | 14.2 | 0.0 | 3.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.18 | 1.00 | | 1.00 | 1.00 | | 0.17 |
| Lane Grp Cap(c), veh/h | 257 | 745 | 631 | 359 | 0 | 945 | 310 | 388 | 436 | 206 | 0 | 376 |
| V/C Ratio(X) | 0.04 | 0.68 | 0.11 | 0.62 | 0.00 | 0.64 | 0.49 | 0.25 | 0.97 | 0.27 | 0.00 | 0.14 |
| Avail Cap(c_a), veh/h | 257 | 745 | 631 | 416 | 0 | 945 | 310 | 388 | 436 | 206 | 0 | 376 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.86 | 0.86 | 0.86 | 0.59 | 0.00 | 0.59 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.0 | 20.6 | 14.0 | 17.4 | 0.0 | 23.2 | 41.2 | 35.3 | 38.7 | 41.0 | 0.0 | 34.2 |
| Incr Delay (d2), s/veh | 0.2 | 4.3 | 0.3 | 1.3 | 0.0 | 2.0 | 1.2 | 0.3 | 34.1 | 0.7 | 0.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 10.9 | 1.0 | 2.6 | 0.0 | 14.7 | 4.1 | 2.3 | 15.9 | 1.5 | 0.0 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 28.2 | 25.0 | 14.3 | 18.7 | 0.0 | 25.2 | 42.4 | 35.7 | 72.8 | 41.6 | 0.0 | 34.4 |
| LnGrp LOS | C | C | B | B | A | C | D | D | E | D | A | C |
| Approach Vol, veh/h | | 589 | | | 828 | | | 670 | | | 107 | |
| Approach Delay, s/veh | | 23.7 | | | 23.4 | | | 60.5 | | | 38.1 | |
| Approach LOS | | C | | | C | | | E | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 14.2 | 69.8 | | 36.0 | | 84.0 | | 36.0 | | | | |
| Change Period (Y+Rc), s | 4.0 | 6.0 | | 5.0 | | 6.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 59.0 | | 31.0 | | 78.0 | | 31.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 19.9 | 34.0 | | 16.2 | | 41.3 | | 33.0 | | | | |
| Green Ext Time (p_c), s | 0.3 | 3.6 | | 0.5 | | 4.5 | | 0.0 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | 35.6 | |
| HCM 6th LOS | D | |



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 7 | 938 | 799 | 70 | 82 | 19 |
| Future Volume (veh/h) | 7 | 938 | 799 | 70 | 82 | 19 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | | 1.00 | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | No | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1400 | 1500 | 1500 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 7 | 947 | 807 | 71 | 83 | 19 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 324 | 1148 | 1115 | 98 | 99 | 23 |
| Arrive On Green | 0.82 | 0.82 | 0.82 | 0.82 | 0.09 | 0.09 |
| Sat Flow, veh/h | 473 | 1400 | 1359 | 120 | 1126 | 258 |
| Grp Volume(v), veh/h | 7 | 947 | 0 | 878 | 103 | 0 |
| Grp Sat Flow(s),veh/h/ln | 473 | 1400 | 0 | 1478 | 1397 | 0 |
| Q Serve(g_s), s | 0.8 | 45.1 | 0.0 | 31.5 | 8.7 | 0.0 |
| Cycle Q Clear(g_c), s | 32.3 | 45.1 | 0.0 | 31.5 | 8.7 | 0.0 |
| Prop In Lane | 1.00 | | | 0.08 | 0.81 | 0.18 |
| Lane Grp Cap(c), veh/h | 324 | 1148 | 0 | 1213 | 123 | 0 |
| V/C Ratio(X) | 0.02 | 0.82 | 0.00 | 0.72 | 0.84 | 0.00 |
| Avail Cap(c_a), veh/h | 324 | 1148 | 0 | 1213 | 314 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.74 | 0.74 | 0.00 | 0.09 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 11.9 | 6.0 | 0.0 | 4.8 | 53.9 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 5.1 | 0.0 | 0.3 | 13.7 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 10.1 | 0.0 | 6.4 | 3.6 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 12.0 | 11.1 | 0.0 | 5.1 | 67.5 | 0.0 |
| LnGrp LOS | B | B | A | A | E | A |
| Approach Vol, veh/h | | 954 | 878 | | 103 | |
| Approach Delay, s/veh | | 11.1 | 5.1 | | 67.5 | |
| Approach LOS | | B | A | | E | |

| Timer - Assigned Phs | 2 | 4 | 6 |
|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 104.4 | 15.6 | 104.4 |
| Change Period (Y+Rc), s | 6.0 | 5.0 | 6.0 |
| Max Green Setting (Gmax), s | 82.0 | 27.0 | 82.0 |
| Max Q Clear Time (g_c+I1), s | 47.1 | 10.7 | 33.5 |
| Green Ext Time (p_c), s | 9.1 | 0.2 | 8.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 11.4 |
| HCM 6th LOS | B |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 186 | 780 | 25 | 17 | 644 | 106 | 74 | 82 | 29 | 182 | 26 | 155 |
| Future Volume (veh/h) | 186 | 780 | 25 | 17 | 644 | 106 | 74 | 82 | 29 | 182 | 26 | 155 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1400 | 1400 | 1500 | 1488 | 1488 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 192 | 804 | 26 | 18 | 664 | 109 | 76 | 85 | 30 | 188 | 27 | 160 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 182 | 814 | 26 | 93 | 662 | 109 | 162 | 135 | 48 | 243 | 30 | 179 |
| Arrive On Green | 0.06 | 0.40 | 0.40 | 0.02 | 0.53 | 0.53 | 0.06 | 0.13 | 0.13 | 0.09 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1333 | 1349 | 44 | 1429 | 1247 | 205 | 1429 | 1059 | 374 | 1429 | 188 | 1112 |
| Grp Volume(v), veh/h | 192 | 0 | 830 | 18 | 0 | 773 | 76 | 0 | 115 | 188 | 0 | 187 |
| Grp Sat Flow(s),veh/h/ln | 1333 | 0 | 1392 | 1429 | 0 | 1451 | 1429 | 0 | 1433 | 1429 | 0 | 1300 |
| Q Serve(g_s), s | 11.0 | 0.0 | 71.0 | 0.7 | 0.0 | 63.7 | 5.5 | 0.0 | 9.1 | 11.0 | 0.0 | 16.9 |
| Cycle Q Clear(g_c), s | 11.0 | 0.0 | 71.0 | 0.7 | 0.0 | 63.7 | 5.5 | 0.0 | 9.1 | 11.0 | 0.0 | 16.9 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.14 | 1.00 | | 0.26 | 1.00 | | 0.86 |
| Lane Grp Cap(c), veh/h | 182 | 0 | 841 | 93 | 0 | 771 | 162 | 0 | 183 | 243 | 0 | 210 |
| V/C Ratio(X) | 1.05 | 0.00 | 0.99 | 0.19 | 0.00 | 1.00 | 0.47 | 0.00 | 0.63 | 0.77 | 0.00 | 0.89 |
| Avail Cap(c_a), veh/h | 182 | 0 | 841 | 198 | 0 | 771 | 210 | 0 | 298 | 243 | 0 | 271 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.45 | 0.00 | 0.45 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.3 | 0.0 | 35.6 | 29.0 | 0.0 | 28.1 | 42.8 | 0.0 | 49.7 | 43.3 | 0.0 | 49.3 |
| Incr Delay (d2), s/veh | 59.5 | 0.0 | 18.1 | 1.0 | 0.0 | 33.2 | 2.1 | 0.0 | 2.6 | 14.1 | 0.0 | 23.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.7 | 0.0 | 29.1 | 0.3 | 0.0 | 28.0 | 2.1 | 0.0 | 3.4 | 2.3 | 0.0 | 6.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 99.8 | 0.0 | 53.7 | 29.9 | 0.0 | 61.3 | 44.9 | 0.0 | 52.3 | 57.4 | 0.0 | 72.4 |
| LnGrp LOS | F | A | D | C | A | F | D | A | D | E | A | E |
| Approach Vol, veh/h | | 1022 | | | 791 | | | 191 | | | 375 | |
| Approach Delay, s/veh | | 62.4 | | | 60.6 | | | 49.4 | | | 64.9 | |
| Approach LOS | | E | | | E | | | D | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 16.3 | 78.5 | 10.9 | 24.4 | 15.0 | 69.7 | 15.0 | 20.3 |
| Change Period (Y+Rc), s | 4.0 | 6.0 | 4.0 | 5.0 | 4.0 | 6.0 | 4.0 | 5.0 |
| Max Green Setting (Gmax), s | 11.3 | 54.0 | 11.0 | 25.0 | 11.0 | 54.0 | 11.0 | 25.0 |
| Max Q Clear Time (g_c+I1), s | 12.7 | 73.0 | 7.5 | 18.9 | 13.0 | 65.7 | 13.0 | 11.1 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.4 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 61.1 |
| HCM 6th LOS | E |

| Intersection | |
|---|---|
| Int Delay, s/veh | 9.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 10 | 938 | 51 | 76 | 757 | 15 | 13 | 5 | 106 | 5 | 15 | 10 |
| Future Vol, veh/h | 10 | 938 | 51 | 76 | 757 | 15 | 13 | 5 | 106 | 5 | 15 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 500 | - | - | 500 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 2 | 0 | 0 | 0 |
| Mvmt Flow | 10 | 967 | 53 | 78 | 780 | 15 | 13 | 5 | 109 | 5 | 15 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 795 | 0 | 0 | 1020 | 0 | 0 | 1970 | 1965 | 994 | 2015 | 1984 | 788 |
| Stage 1 | - | - | - | - | - | - | 1014 | 1014 | - | 944 | 944 | - |
| Stage 2 | - | - | - | - | - | - | 956 | 951 | - | 1071 | 1040 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.18 | 6.5 | 6.22 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.18 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.18 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.572 | 4 | 3.318 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 835 | - | - | 688 | - | - | 45 | 64 | 297 | 44 | 62 | 394 |
| Stage 1 | - | - | - | - | - | - | 280 | 319 | - | 317 | 344 | - |
| Stage 2 | - | - | - | - | - | - | 302 | 341 | - | 270 | 310 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 835 | - | - | 688 | - | - | 31 | 56 | 297 | 23 | 54 | 394 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 31 | 56 | - | 23 | 54 | - |
| Stage 1 | - | - | - | - | - | - | 277 | 315 | - | 313 | 305 | - |
| Stage 2 | - | - | - | - | - | - | 248 | 302 | - | 166 | 306 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 1 | 109.7 | 123.1 |
| HCM LOS | | | F | F |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 143 | 835 | - | - | 688 | - | - | 58 |
| HCM Lane V/C Ratio | 0.894 | 0.012 | - | - | 0.114 | - | - | 0.533 |
| HCM Control Delay (s) | 109.7 | 9.4 | - | - | 10.9 | - | - | 123.1 |
| HCM Lane LOS | F | A | - | - | B | - | - | F |
| HCM 95th %tile Q(veh) | 6 | 0 | - | - | 0.4 | - | - | 2.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 186 | 678 | 141 | 269 | 525 | 402 | 171 | 640 | 264 | 250 | 436 | 84 |
| Future Volume (veh/h) | 186 | 678 | 141 | 269 | 525 | 402 | 171 | 640 | 264 | 250 | 436 | 84 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1389 | 1400 | 1500 | 1488 | 1500 | 1500 | 1488 | 1500 | 1500 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 192 | 699 | 145 | 277 | 541 | 414 | 176 | 660 | 272 | 258 | 449 | 87 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 190 | 904 | 529 | 316 | 531 | 623 | 285 | 745 | 480 | 257 | 700 | 135 |
| Arrive On Green | 0.11 | 0.34 | 0.34 | 0.15 | 0.47 | 0.47 | 0.10 | 0.26 | 0.26 | 0.13 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1333 | 2639 | 1186 | 2771 | 1488 | 1271 | 1429 | 2828 | 1271 | 1429 | 2384 | 459 |
| Grp Volume(v), veh/h | 192 | 699 | 145 | 277 | 541 | 414 | 176 | 660 | 272 | 258 | 267 | 269 |
| Grp Sat Flow(s),veh/h/ln | 1333 | 1320 | 1186 | 1386 | 1488 | 1271 | 1429 | 1414 | 1271 | 1429 | 1425 | 1417 |
| Q Serve(g_s), s | 16.0 | 35.5 | 11.6 | 14.7 | 53.5 | 35.9 | 13.4 | 33.6 | 25.4 | 20.0 | 24.5 | 24.8 |
| Cycle Q Clear(g_c), s | 16.0 | 35.5 | 11.6 | 14.7 | 53.5 | 35.9 | 13.4 | 33.6 | 25.4 | 20.0 | 24.5 | 24.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 190 | 904 | 529 | 316 | 531 | 623 | 285 | 745 | 480 | 257 | 418 | 416 |
| V/C Ratio(X) | 1.01 | 0.77 | 0.27 | 0.88 | 1.02 | 0.66 | 0.62 | 0.89 | 0.57 | 1.00 | 0.64 | 0.65 |
| Avail Cap(c_a), veh/h | 190 | 904 | 529 | 462 | 531 | 623 | 328 | 745 | 480 | 257 | 418 | 416 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.43 | 0.43 | 0.43 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.1 | 44.1 | 26.2 | 62.6 | 39.4 | 23.4 | 36.2 | 53.1 | 37.0 | 39.2 | 46.1 | 46.2 |
| Incr Delay (d2), s/veh | 67.7 | 4.0 | 0.2 | 5.2 | 30.5 | 1.1 | 2.2 | 14.7 | 4.8 | 56.8 | 7.3 | 7.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 10.8 | 12.1 | 3.3 | 5.2 | 22.1 | 9.6 | 4.8 | 13.3 | 8.5 | 11.0 | 9.4 | 9.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 111.8 | 48.1 | 26.5 | 67.8 | 70.0 | 24.5 | 38.4 | 67.7 | 41.8 | 96.0 | 53.4 | 53.7 |
| LnGrp LOS | F | D | C | E | F | C | D | E | D | F | D | D |
| Approach Vol, veh/h | | 1036 | | | 1232 | | | 1108 | | | 794 | |
| Approach Delay, s/veh | | 56.9 | | | 54.2 | | | 56.7 | | | 67.4 | |
| Approach LOS | | E | | | D | | | E | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 24.0 | 46.0 | 22.1 | 57.9 | 19.5 | 50.5 | 20.0 | 60.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | 5.0 | 6.5 | 4.0 | 6.5 | 4.0 | 6.5 |
| Max Green Setting (Gmax), s | 20.0 | 39.5 | 25.0 | 43.5 | 20.0 | 39.5 | 16.0 | 53.5 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 35.6 | 16.7 | 37.5 | 15.4 | 26.8 | 18.0 | 55.5 |
| Green Ext Time (p_c), s | 0.0 | 1.6 | 0.5 | 2.2 | 0.1 | 2.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 58.0 |
| HCM 6th LOS | E |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 147 | 1000 | 103 | 163 | 995 | 201 | 113 | 89 | 277 | 276 | 70 | 94 |
| Future Volume (veh/h) | 147 | 1000 | 103 | 163 | 995 | 201 | 113 | 89 | 277 | 276 | 70 | 94 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1400 | 1389 | 1400 | 1488 | 1488 | 1488 | 1488 | 1488 | 1488 | 1500 | 1500 | 1500 |
| Adj Flow Rate, veh/h | 153 | 1042 | 107 | 170 | 1036 | 209 | 118 | 93 | 289 | 288 | 73 | 98 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Cap, veh/h | 171 | 1209 | 544 | 193 | 1046 | 210 | 357 | 526 | 446 | 297 | 530 | 449 |
| Arrive On Green | 0.06 | 0.30 | 0.30 | 0.05 | 0.29 | 0.29 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| Sat Flow, veh/h | 1333 | 2639 | 1186 | 1417 | 2345 | 472 | 966 | 1488 | 1261 | 803 | 1500 | 1271 |
| Grp Volume(v), veh/h | 153 | 1042 | 107 | 170 | 623 | 622 | 118 | 93 | 289 | 288 | 73 | 98 |
| Grp Sat Flow(s),veh/h/ln | 1333 | 1320 | 1186 | 1417 | 1414 | 1403 | 966 | 1488 | 1261 | 803 | 1500 | 1271 |
| Q Serve(g_s), s | 11.5 | 55.9 | 10.0 | 9.6 | 65.8 | 66.3 | 14.2 | 6.5 | 28.8 | 46.5 | 5.0 | 8.1 |
| Cycle Q Clear(g_c), s | 11.5 | 55.9 | 10.0 | 9.6 | 65.8 | 66.3 | 19.1 | 6.5 | 28.8 | 53.0 | 5.0 | 8.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.34 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 171 | 1209 | 544 | 193 | 630 | 626 | 357 | 526 | 446 | 297 | 530 | 449 |
| V/C Ratio(X) | 0.90 | 0.86 | 0.20 | 0.88 | 0.99 | 0.99 | 0.33 | 0.18 | 0.65 | 0.97 | 0.14 | 0.22 |
| Avail Cap(c_a), veh/h | 236 | 1209 | 544 | 280 | 630 | 626 | 357 | 526 | 446 | 297 | 530 | 449 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.57 | 0.57 | 0.57 | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 45.2 | 47.8 | 31.8 | 33.9 | 52.6 | 52.7 | 39.5 | 33.5 | 40.7 | 54.9 | 33.0 | 34.0 |
| Incr Delay (d2), s/veh | 16.0 | 4.9 | 0.5 | 15.9 | 30.7 | 31.8 | 0.4 | 0.1 | 3.0 | 43.7 | 0.1 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.7 | 19.8 | 3.1 | 4.1 | 29.3 | 29.4 | 3.5 | 2.4 | 9.5 | 14.8 | 1.9 | 2.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 61.2 | 52.7 | 32.3 | 49.8 | 83.3 | 84.5 | 39.9 | 33.6 | 43.7 | 98.5 | 33.1 | 34.2 |
| LnGrp LOS | E | D | C | D | F | F | D | C | D | F | C | C |
| Approach Vol, veh/h | | 1302 | | | 1415 | | | 500 | | | 459 | |
| Approach Delay, s/veh | | 52.0 | | | 79.8 | | | 40.9 | | | 74.4 | |
| Approach LOS | | D | | | E | | | D | | | E | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 15.8 | 75.2 | | 59.0 | 17.6 | 73.4 | | 59.0 |
| Change Period (Y+Rc), s | 4.0 | 6.5 | | 6.0 | 4.0 | 6.5 | | 6.0 |
| Max Green Setting (Gmax), s | 21.0 | 59.5 | | 53.0 | 21.0 | 59.5 | | 53.0 |
| Max Q Clear Time (g_c+I1), s | 11.6 | 57.9 | | 55.0 | 13.5 | 68.3 | | 30.8 |
| Green Ext Time (p_c), s | 0.2 | 1.0 | | 0.0 | 0.2 | 0.0 | | 1.7 |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 64.0 |
| HCM 6th LOS | | E |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SBL2 | SBL | SBR | NWL | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↑↑ | ↱ | | ↑↑ | ↱ | ↰ | | ↱ | | |
| Traffic Volume (veh/h) | 0 | 1197 | 382 | 0 | 1314 | 137 | 64 | 0 | 80 | 0 | 0 |
| Future Volume (veh/h) | 0 | 1197 | 382 | 0 | 1314 | 137 | 64 | 0 | 80 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Work Zone On Approach | | No | | | No | | | No | | | |
| Adj Sat Flow, veh/h/ln | 0 | 1750 | 1736 | 0 | 1750 | 1736 | 1586 | 1586 | 1668 | | |
| Adj Flow Rate, veh/h | 0 | 1260 | 0 | 0 | 1383 | 144 | 67 | 67 | 84 | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | |
| Percent Heavy Veh, % | 0 | 0 | 1 | 0 | 0 | 1 | 12 | 12 | 6 | | |
| Cap, veh/h | 0 | 2824 | | 0 | 2824 | 1250 | 115 | 115 | 107 | | |
| Arrive On Green | 0.00 | 0.56 | 0.00 | 0.00 | 0.56 | 0.56 | 0.08 | 0.08 | 0.08 | | |
| Sat Flow, veh/h | 0 | 3413 | 1471 | 0 | 3413 | 1471 | 1511 | 1511 | 1414 | | |
| Grp Volume(v), veh/h | 0 | 1260 | 0 | 0 | 1383 | 144 | 67 | 67 | 84 | | |
| Grp Sat Flow(s),veh/h/ln | 0 | 1663 | 1471 | 0 | 1663 | 1471 | 1511 | 1511 | 1414 | | |
| Q Serve(g_s), s | 0.0 | 33.3 | 0.0 | 0.0 | 37.8 | 6.9 | 6.4 | 6.4 | 8.8 | | |
| Cycle Q Clear(g_c), s | 0.0 | 33.3 | 0.0 | 0.0 | 37.8 | 6.9 | 6.4 | 6.4 | 8.8 | | |
| Prop In Lane | 0.00 | | 1.00 | 0.00 | | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 0 | 2824 | | 0 | 2824 | 1250 | 115 | 115 | 107 | | |
| V/C Ratio(X) | 0.00 | 0.45 | | 0.00 | 0.49 | 0.12 | 0.58 | 0.58 | 0.78 | | |
| Avail Cap(c_a), veh/h | 0 | 2824 | | 0 | 2824 | 1250 | 502 | 502 | 469 | | |
| HCM Platoon Ratio | 1.00 | 0.66 | 0.66 | 1.00 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 0.00 | 0.55 | 0.00 | 0.00 | 0.84 | 0.84 | 1.00 | 1.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 0.0 | 12.3 | 0.0 | 0.0 | 13.3 | 6.5 | 67.0 | 67.0 | 68.1 | | |
| Incr Delay (d2), s/veh | 0.0 | 0.3 | 0.0 | 0.0 | 0.5 | 0.2 | 4.6 | 4.6 | 11.6 | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| %ile BackOfQ(50%),veh/ln | 0.0 | 13.6 | 0.0 | 0.0 | 15.5 | 8.7 | 2.7 | 2.7 | 3.5 | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 12.6 | 0.0 | 0.0 | 13.8 | 6.6 | 71.6 | 71.6 | 79.7 | | |
| LnGrp LOS | A | B | | A | B | A | E | E | E | | |
| Approach Vol, veh/h | | 1260 | A | | 1527 | | 151 | 151 | | | |
| Approach Delay, s/veh | | 12.6 | | | 13.1 | | 76.1 | 76.1 | | | |
| Approach LOS | | B | | | B | | E | E | | | |

| Timer - Assigned Phs | 2 | 4 | 6 |
|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 133.4 | 16.6 | 133.4 |
| Change Period (Y+Rc), s | * 6 | * 5.2 | * 6 |
| Max Green Setting (Gmax), s | * 89 | * 50 | * 89 |
| Max Q Clear Time (g_c+I1), s | 0.0 | 10.8 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 0.7 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 16.1 |
| HCM 6th LOS | B |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 120 | 1138 | 0 | 0 | 974 | 116 | 454 | 0 | 186 | 0 | 0 | 0 |
| Future Volume (veh/h) | 120 | 1138 | 0 | 0 | 974 | 116 | 454 | 0 | 186 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1723 | 1736 | 0 | 0 | 1736 | 1641 | 1736 | 1750 | 1750 | | | |
| Adj Flow Rate, veh/h | 124 | 1173 | 0 | 0 | 1004 | 120 | 468 | 0 | 192 | | | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | | | |
| Percent Heavy Veh, % | 2 | 1 | 0 | 0 | 1 | 8 | 1 | 0 | 0 | | | |
| Cap, veh/h | 428 | 2500 | 0 | 0 | 2292 | 966 | 554 | 0 | 248 | | | |
| Arrive On Green | 0.06 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.17 | 0.00 | 0.17 | | | |
| Sat Flow, veh/h | 1641 | 3386 | 0 | 0 | 3386 | 1391 | 3307 | 0 | 1483 | | | |
| Grp Volume(v), veh/h | 124 | 1173 | 0 | 0 | 1004 | 120 | 468 | 0 | 192 | | | |
| Grp Sat Flow(s),veh/h/ln | 1641 | 1650 | 0 | 0 | 1650 | 1391 | 1654 | 0 | 1483 | | | |
| Q Serve(g_s), s | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.6 | 0.0 | 18.6 | | | |
| Cycle Q Clear(g_c), s | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.6 | 0.0 | 18.6 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 428 | 2500 | 0 | 0 | 2292 | 966 | 554 | 0 | 248 | | | |
| V/C Ratio(X) | 0.29 | 0.47 | 0.00 | 0.00 | 0.44 | 0.12 | 0.85 | 0.00 | 0.77 | | | |
| Avail Cap(c_a), veh/h | 631 | 2500 | 0 | 0 | 2292 | 966 | 944 | 0 | 423 | | | |
| HCM Platoon Ratio | 1.66 | 1.66 | 1.00 | 1.00 | 1.66 | 1.66 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 0.89 | 0.89 | 0.00 | 0.00 | 0.77 | 0.77 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.6 | 0.0 | 59.7 | | | |
| Incr Delay (d2), s/veh | 0.2 | 0.6 | 0.0 | 0.0 | 0.5 | 0.2 | 2.7 | 0.0 | 3.8 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 1.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 8.9 | 0.0 | 7.3 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 5.4 | 0.6 | 0.0 | 0.0 | 0.5 | 0.2 | 63.3 | 0.0 | 63.5 | | | |
| LnGrp LOS | A | A | A | A | A | A | E | A | E | | | |
| Approach Vol, veh/h | | 1297 | | | 1124 | | | 660 | | | | |
| Approach Delay, s/veh | | 1.0 | | | 0.4 | | | 63.4 | | | | |
| Approach LOS | | A | | | A | | | E | | | | |
| Timer - Assigned Phs | | 2 | | | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 119.7 | | | 9.5 | 110.2 | | 30.3 | | | | |
| Change Period (Y+Rc), s | | 6.0 | | | 4.0 | 6.0 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | | 96.0 | | | 24.0 | 68.0 | | 42.8 | | | | |
| Max Q Clear Time (g_c+I1), s | | 0.0 | | | 5.2 | 0.0 | | 22.6 | | | | |
| Green Ext Time (p_c), s | | 0.0 | | | 0.3 | 0.0 | | 2.5 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 14.2 |
| HCM 6th LOS | B |

**Notes**

User approved volume balancing among the lanes for turning movement.

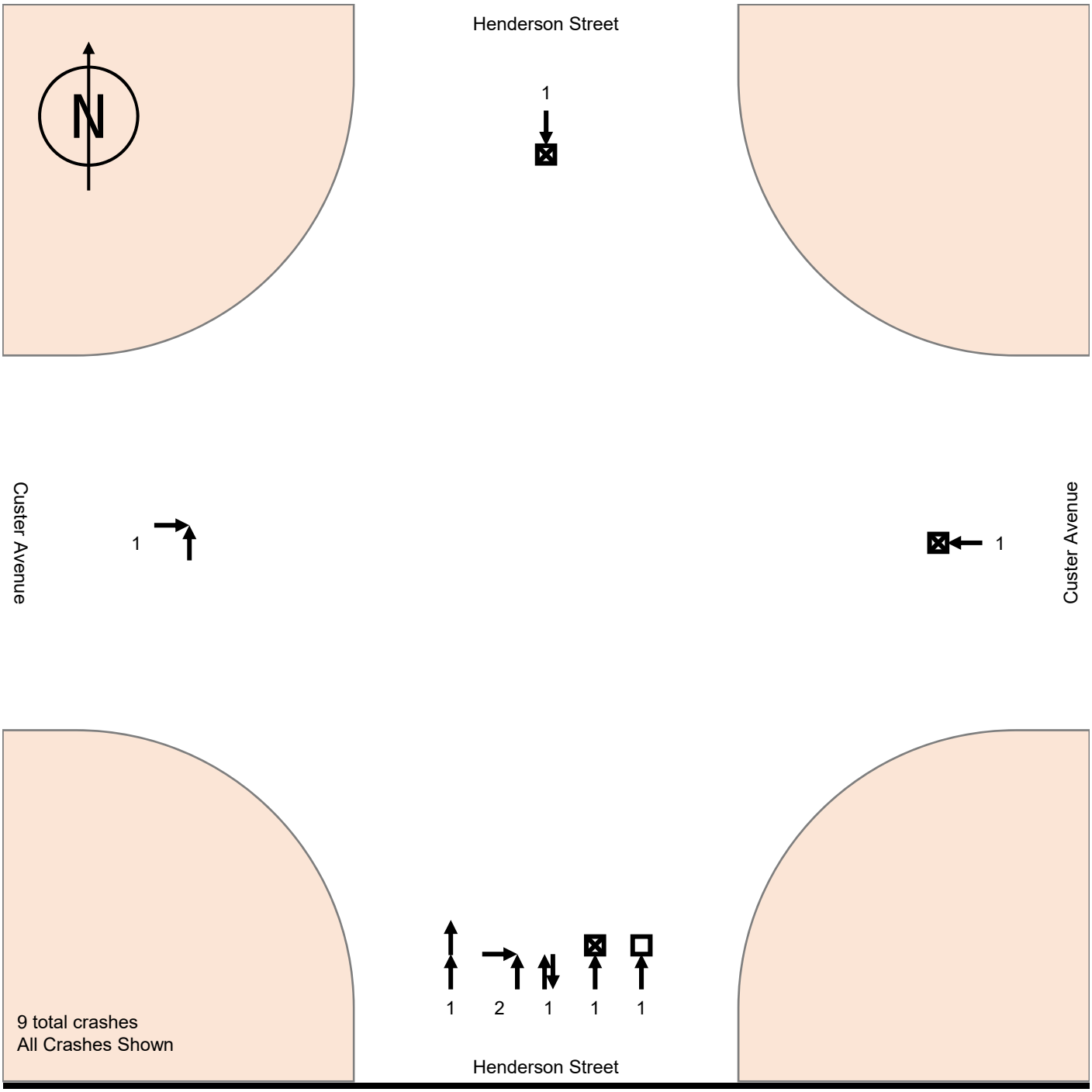
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 363 | 690 | 135 | 132 | 443 | 83 | 421 | 244 | 259 | 159 | 81 | 38 |
| Future Volume (veh/h) | 363 | 690 | 135 | 132 | 443 | 83 | 421 | 244 | 259 | 159 | 81 | 38 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1750 | 1736 | 1736 | 1709 | 1723 | 1695 | 1750 | 1750 | 1723 | 1750 | 1750 | 1750 |
| Adj Flow Rate, veh/h | 386 | 734 | 144 | 140 | 471 | 88 | 448 | 260 | 276 | 169 | 86 | 40 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 1 | 1 | 3 | 2 | 4 | 0 | 0 | 2 | 0 | 0 | 0 |
| Cap, veh/h | 544 | 1726 | 1054 | 348 | 1514 | 780 | 414 | 345 | 375 | 228 | 147 | 303 |
| Arrive On Green | 0.08 | 0.35 | 0.35 | 0.06 | 0.46 | 0.46 | 0.19 | 0.20 | 0.20 | 0.08 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1667 | 3299 | 1471 | 1628 | 3273 | 1437 | 1667 | 1750 | 1460 | 1667 | 1750 | 1483 |
| Grp Volume(v), veh/h | 386 | 734 | 144 | 140 | 471 | 88 | 448 | 260 | 276 | 169 | 86 | 40 |
| Grp Sat Flow(s),veh/h/ln | 1667 | 1650 | 1471 | 1628 | 1637 | 1437 | 1667 | 1750 | 1460 | 1667 | 1750 | 1483 |
| Q Serve(g_s), s | 17.3 | 25.6 | 6.1 | 6.7 | 13.5 | 4.5 | 29.0 | 21.0 | 26.0 | 12.0 | 7.1 | 3.3 |
| Cycle Q Clear(g_c), s | 17.3 | 25.6 | 6.1 | 6.7 | 13.5 | 4.5 | 29.0 | 21.0 | 26.0 | 12.0 | 7.1 | 3.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 544 | 1726 | 1054 | 348 | 1514 | 780 | 414 | 345 | 375 | 228 | 147 | 303 |
| V/C Ratio(X) | 0.71 | 0.43 | 0.14 | 0.40 | 0.31 | 0.11 | 1.08 | 0.75 | 0.74 | 0.74 | 0.59 | 0.13 |
| Avail Cap(c_a), veh/h | 544 | 1726 | 1054 | 447 | 1514 | 780 | 414 | 572 | 564 | 228 | 373 | 494 |
| HCM Platoon Ratio | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.2 | 31.8 | 9.5 | 19.9 | 25.3 | 16.7 | 52.0 | 56.8 | 51.1 | 59.2 | 66.2 | 48.8 |
| Incr Delay (d2), s/veh | 3.5 | 0.7 | 0.2 | 0.6 | 0.5 | 0.3 | 68.5 | 2.5 | 2.1 | 11.7 | 2.7 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.5 | 10.9 | 2.0 | 2.6 | 5.3 | 1.5 | 10.3 | 9.4 | 9.6 | 1.4 | 3.3 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 21.6 | 32.5 | 9.7 | 20.5 | 25.8 | 17.0 | 120.5 | 59.2 | 53.2 | 70.9 | 68.9 | 49.0 |
| LnGrp LOS | C | C | A | C | C | B | F | E | D | E | E | D |
| Approach Vol, veh/h | | 1264 | | | 699 | | | 984 | | | 295 | |
| Approach Delay, s/veh | | 26.6 | | | 23.6 | | | 85.4 | | | 67.3 | |
| Approach LOS | | C | | | C | | | F | | | E | |

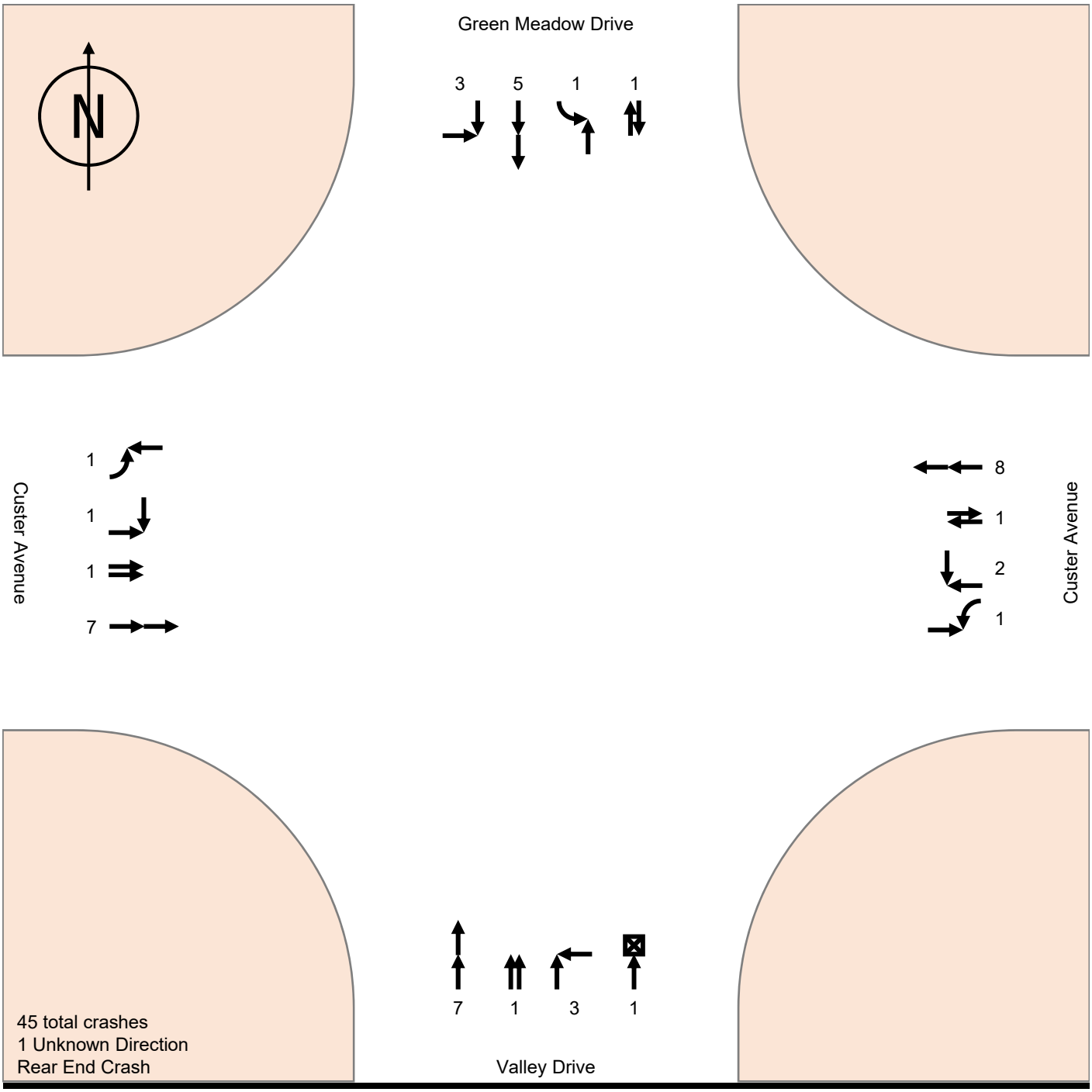
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.9 | 85.5 | 33.0 | 18.6 | 22.0 | 76.4 | 16.0 | 35.6 |
| Change Period (Y+Rc), s | 4.0 | * 7 | 4.0 | 6.0 | 4.0 | * 7 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | 18.0 | * 50 | 29.0 | 32.0 | 18.0 | * 50 | 12.0 | 49.0 |
| Max Q Clear Time (g_c+I1), s | 19.7 | 27.6 | 31.0 | 9.1 | 19.3 | 15.5 | 14.0 | 28.0 |
| Green Ext Time (p_c), s | 0.2 | 3.1 | 0.0 | 0.3 | 0.0 | 1.9 | 0.0 | 1.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 47.5 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.


Henderson Street
1
Custer Avenue
1
1
Custer Avenue
1 2 1 1 1
9 total crashes
All Crashes Shown
Henderson Street
Rear End
Fixed Object
Not Fixed Object
Right Angle
Sideswipe,
Opposite Direction




Rear End

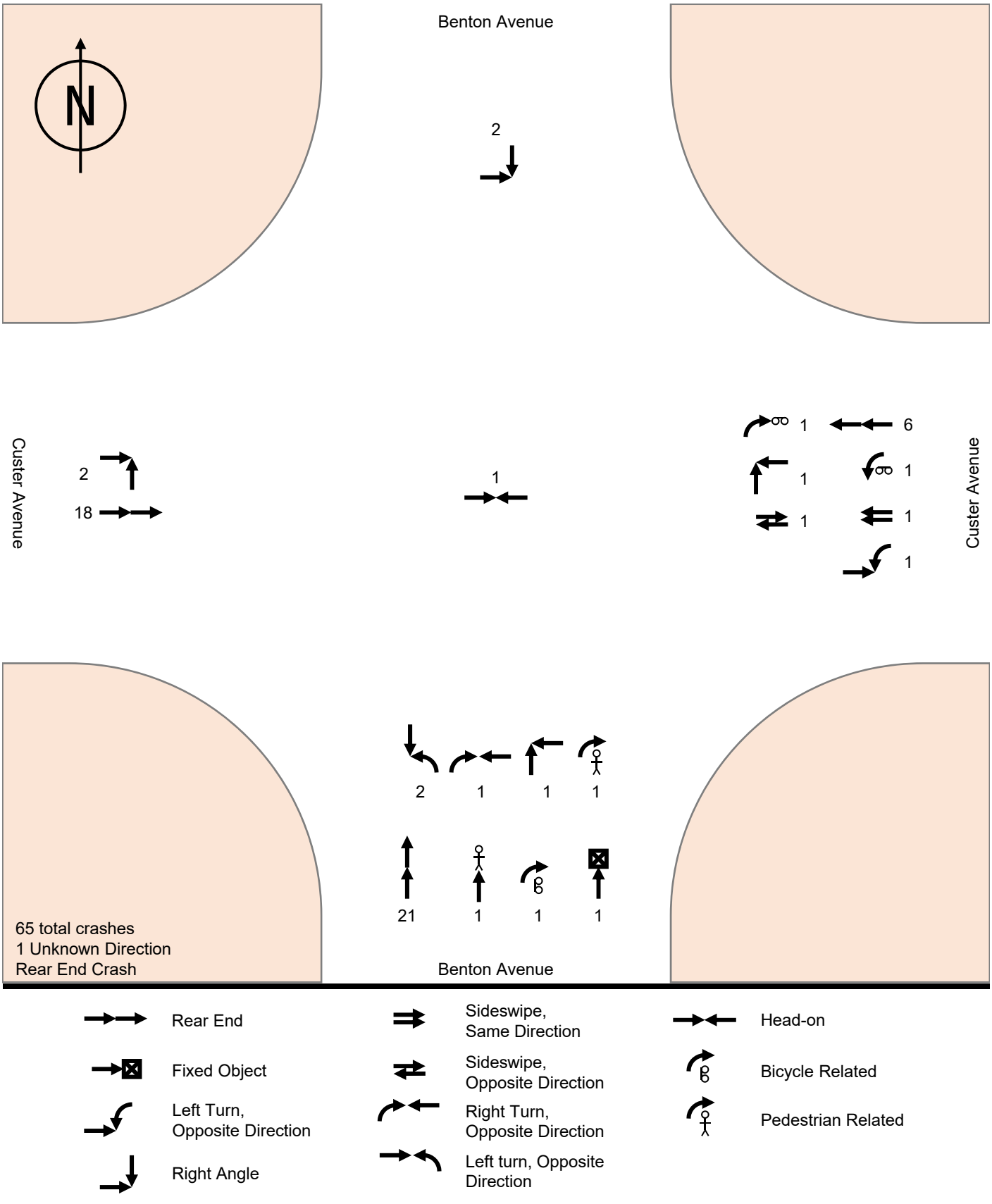
Fixed Object

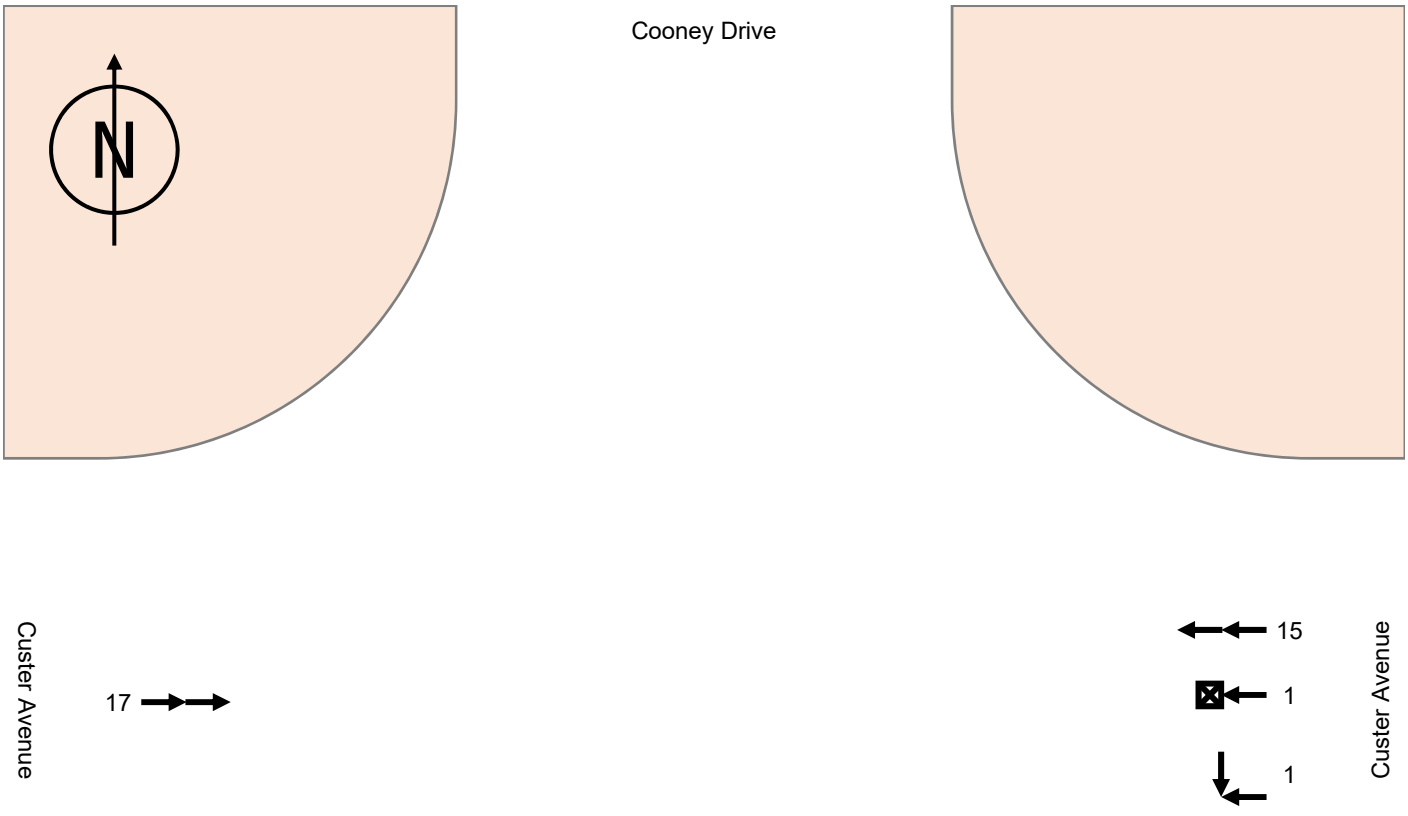
Left Turn,
Opposite Direction

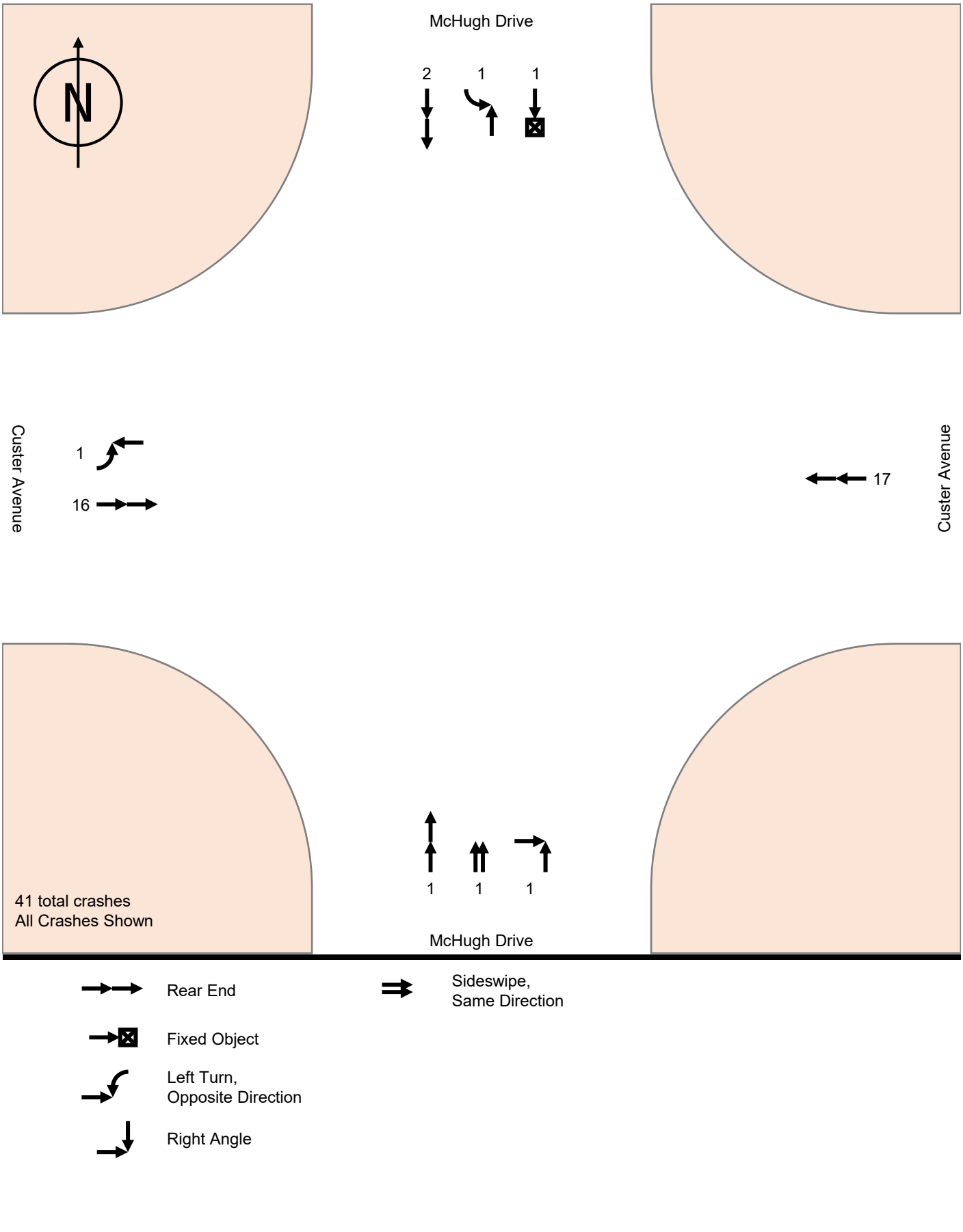
Right Angle

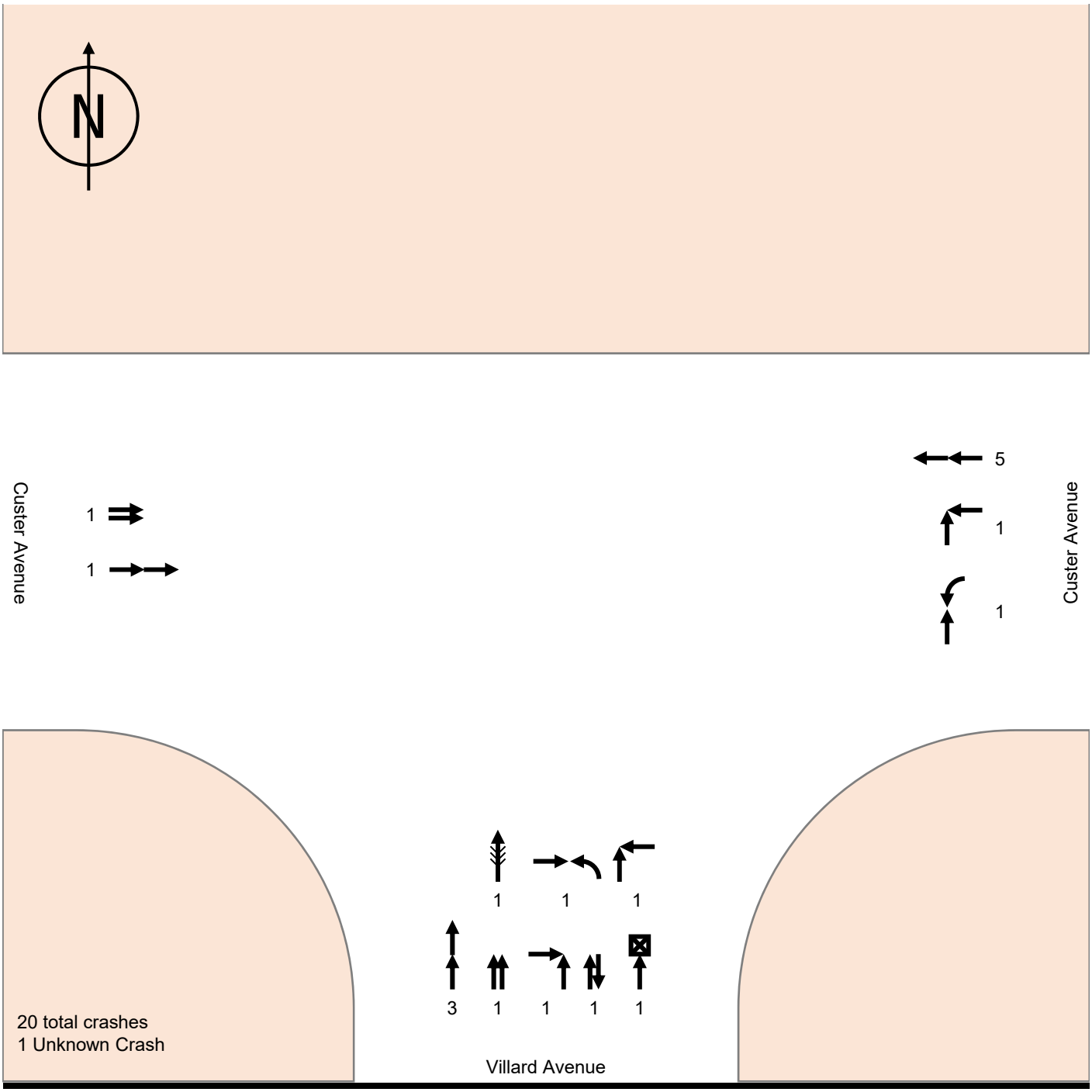
Sideswipe,
Same Direction

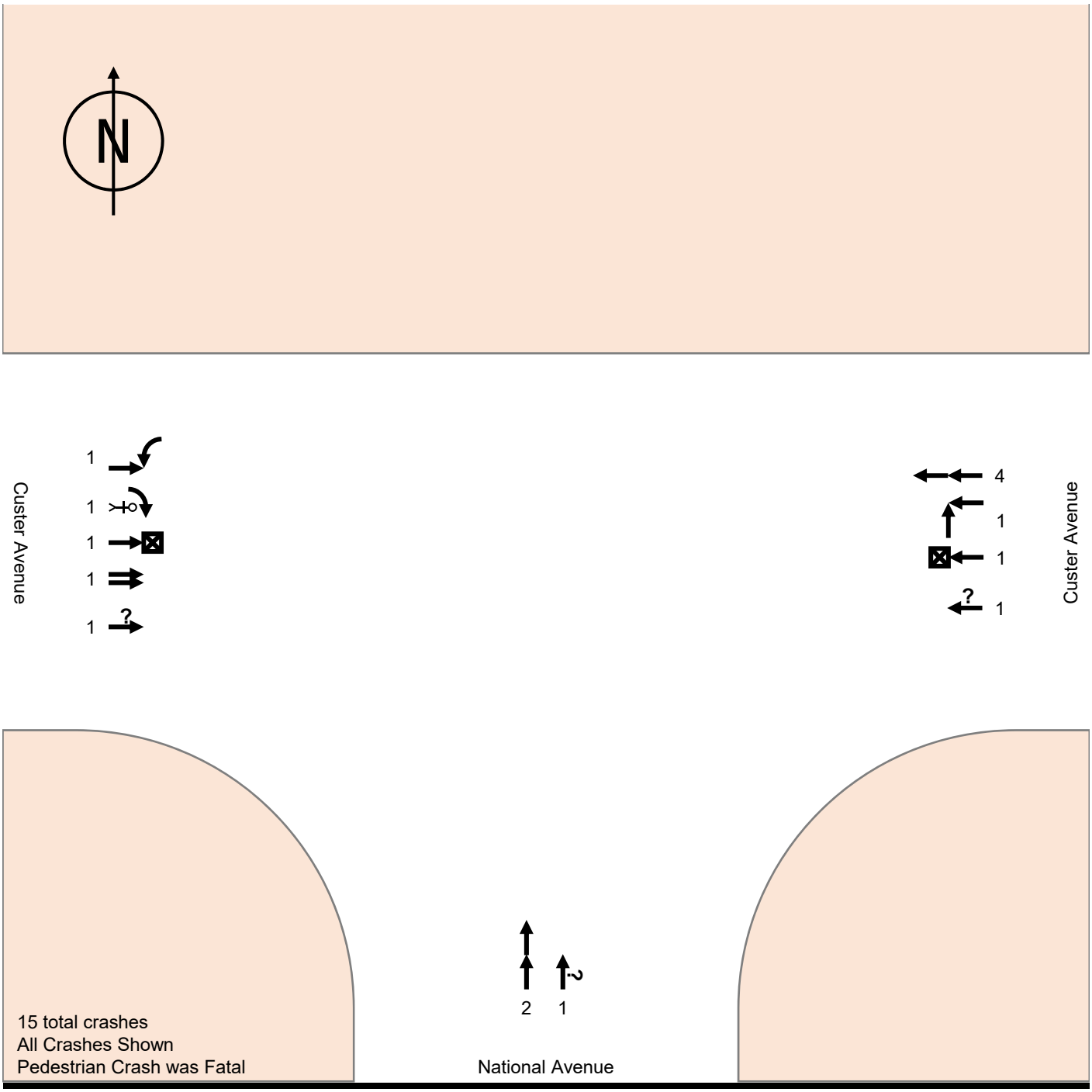
Sideswipe,
Opposite Direction

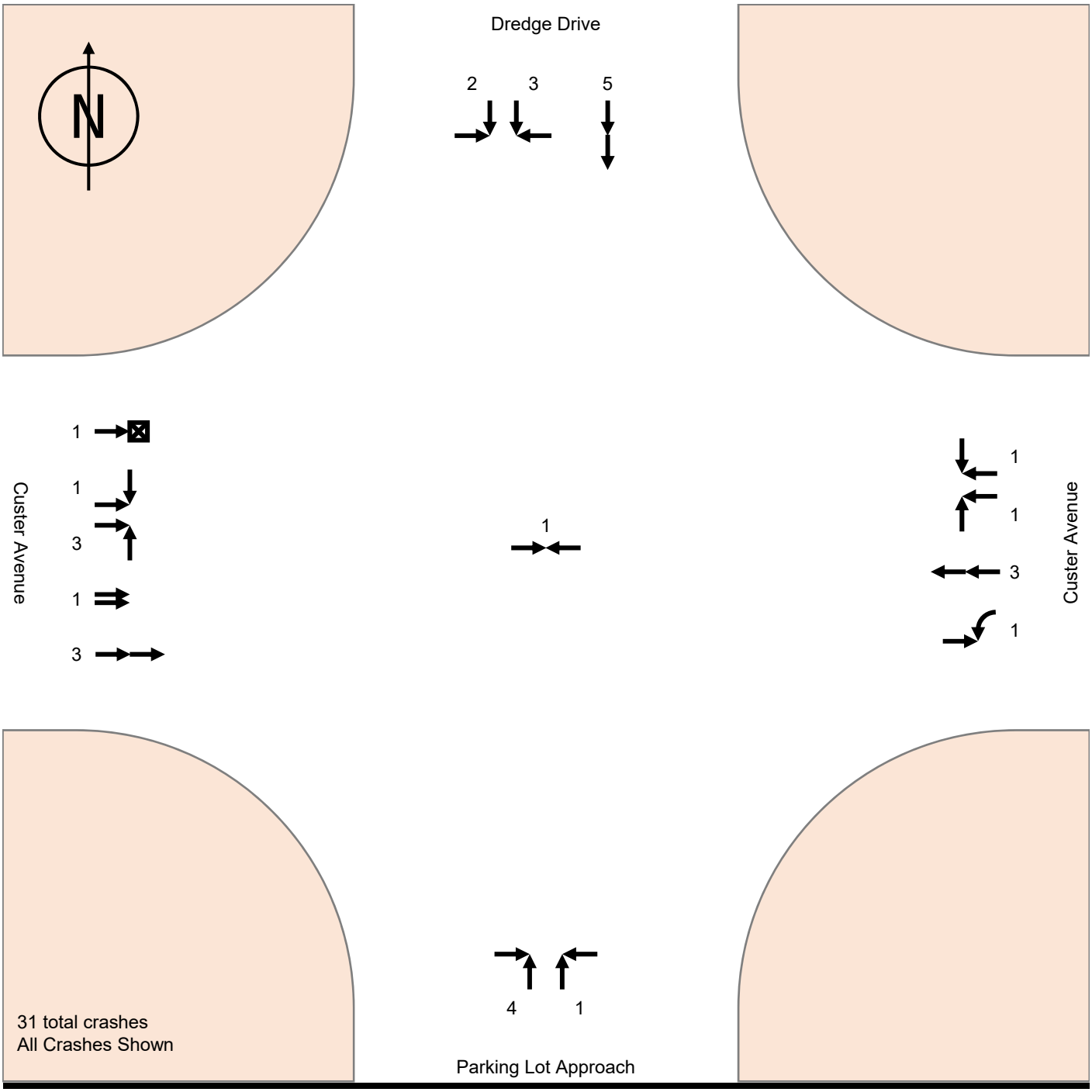

Benton Avenue
N
2
Custer Avenue
2
18
1
1
6
1
1
1
1
1
Custer Avenue
2
1
1
1
21
1
1
1
65 total crashes
1 Unknown Direction
Rear End Crash
Benton Avenue
Rear End
Fixed Object
Left Turn, Opposite Direction
Right Angle
Sideswipe, Same Direction
Sideswipe, Opposite Direction
Right Turn, Opposite Direction
Left turn, Opposite Direction
Head-on
Bicycle Related
Pedestrian Related

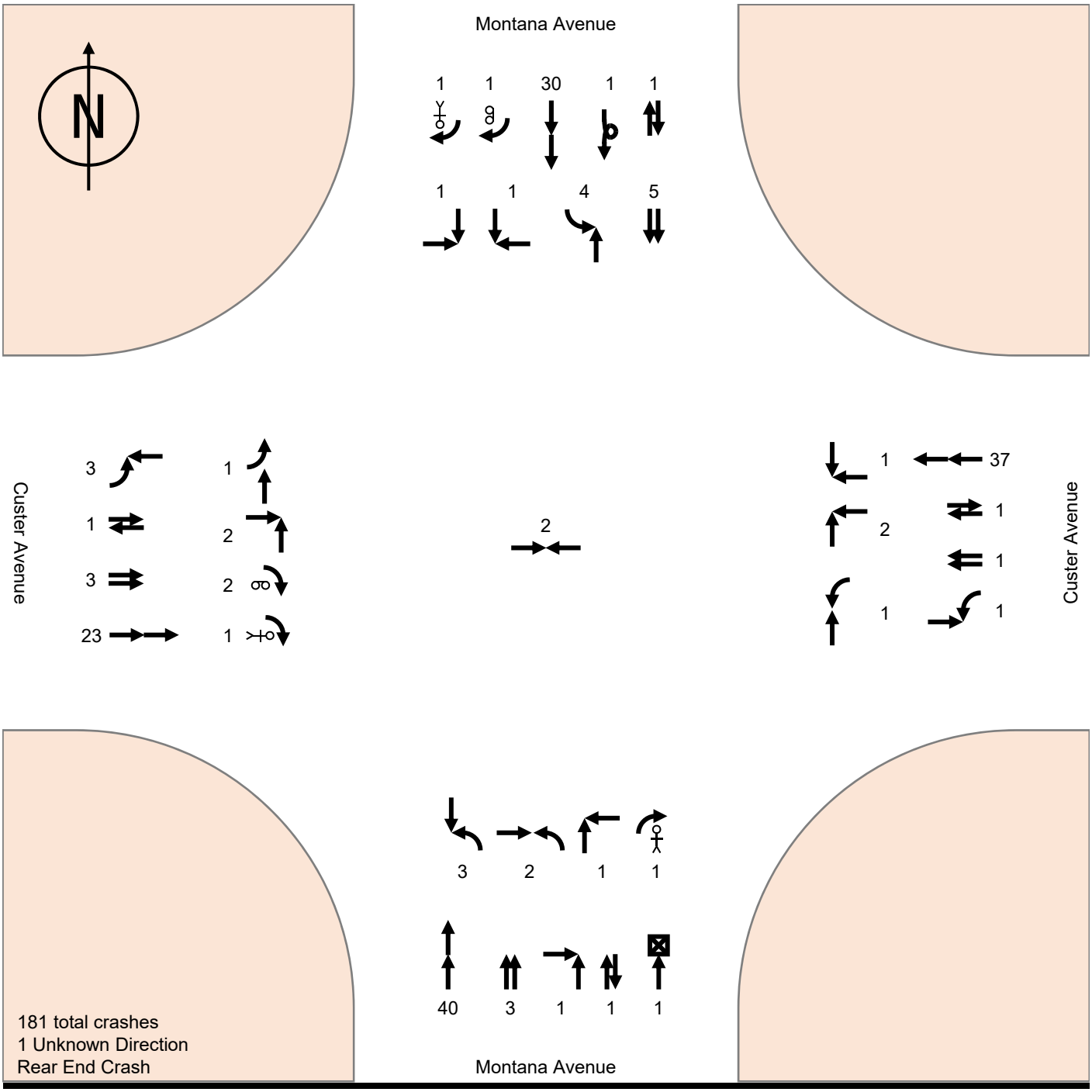

Cooney Drive
N
Custer Avenue
17
15
1
1
Custer Avenue
34 total crashes
All Crashes Show
Rear End
Fixed Object
Right Angle


McHugh Drive
2
1
1
Custer Avenue
1
16
17
Custer Avenue
1
1
1
41 total crashes
All Crashes Shown
McHugh Drive
Rear End
Sideswipe,
Same Direction
Fixed Object
Left Turn,
Opposite Direction
Right Angle


N
Custer Avenue
1
1
5
1
1
Custer Avenue
1
1
1
3
1
1
1
1
20 total crashes
1 Unknown Crash
Villard Avenue
Rear End
Fixed Object
Backing Vehicle
Right Angle
Sideswipe,
Same Direction
Sideswipe,
Opposite Direction
Left turn, Opposite
Direction


N
Custer Avenue
1
1
1
1
1
Custer Avenue
4
1
1
1
2
1
15 total crashes
All Crashes Shown
Pedestrian Crash was Fatal
National Avenue
Rear End
Fixed Object
Left Turn,
Opposite Direction
Right Angle
Sideswipe,
Same Direction
Pedestrian Related
Other


Dredge Drive
2
3
5
N
Custer Avenue
1
1
3
1
3
1
1
1
3
1
Custer Avenue
4
1
31 total crashes
All Crashes Shown
Parking Lot Approach
Rear End
Sideswipe,
Same Direction
Fixed Object
Head-on
Left Turn,
Opposite Direction
Right Angle




Rear End

Fixed Object

Left Turn, Opposite Direction

Right Angle

Sideswipe, Same Direction

Sideswipe, Opposite Direction

Roll Over

Left turn, Opposite Direction

Head-on

Bicycle Related

Pedestrian Related