| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 179 | 144 | 0 | 1026 | 1336 | 907 |
| Future Volume (vph) | 179 | 144 | 0 | 1026 | 1336 | 907 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.97 | 0.85 | | 1.00 | 0.94 | |
| Flt Protected | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3373 | 1441 | | 5085 | 4777 | |
| Flt Permitted | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3373 | 1441 | | 5085 | 4777 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 195 | 157 | 0 | 1115 | 1452 | 986 |
| RTOR Reduction (vph) | 20 | 70 | 0 | 0 | 76 | 0 |
| Lane Group Flow (vph) | 222 | 40 | 0 | 1115 | 2362 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 12.5 | 12.5 | | 89.1 | 89.1 | |
| Effective Green, g (s) | 12.5 | 12.5 | | 89.1 | 89.1 | |
| Actuated g/C Ratio | 0.11 | 0.11 | | 0.81 | 0.81 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 381 | 162 | | 4096 | 3848 | |
| v/s Ratio Prot | c0.07 | | | 0.22 | c0.49 | |
| v/s Ratio Perm | | 0.03 | | | | |
| v/c Ratio | 0.58 | 0.25 | | 0.27 | 0.61 | |
| Uniform Delay, d1 | 46.6 | 44.8 | | 2.7 | 4.1 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 2.3 | 0.8 | | 0.2 | 0.7 | |
| Delay (s) | 48.9 | 45.6 | | 2.8 | 4.9 | |
| Level of Service | D | D | | A | A | |
| Approach Delay (s) | 47.8 | | | 2.8 | 4.9 | |
| Approach LOS | D | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 8.2 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.61 | | |
| Actuated Cycle Length (s) | 110.6 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 60.3% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 956 | 290 | 137 | 425 | 0 | 0 | 0 | 0 | 385 | 199 | 162 |
| Future Volume (vph) | 0 | 956 | 290 | 137 | 425 | 0 | 0 | 0 | 0 | 385 | 199 | 162 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.99 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3112 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3112 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 1039 | 315 | 149 | 462 | 0 | 0 | 0 | 0 | 418 | 216 | 176 |
| RTOR Reduction (vph) | 0 | 0 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 98 |
| Lane Group Flow (vph) | 0 | 1039 | 110 | 149 | 462 | 0 | 0 | 0 | 0 | 213 | 436 | 60 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 28.2 | 28.2 | 8.4 | 41.1 | | | | | 30.8 | 30.8 | 30.8 |
| Effective Green, g (s) | | 28.2 | 28.2 | 8.4 | 41.1 | | | | | 30.8 | 30.8 | 30.8 |
| Actuated g/C Ratio | | 0.35 | 0.35 | 0.10 | 0.51 | | | | | 0.38 | 0.38 | 0.38 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1772 | 551 | 356 | 1797 | | | | | 612 | 1184 | 548 |
| v/s Ratio Prot | | c0.20 | | c0.04 | 0.13 | | | | | 0.13 | c0.14 | |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.04 |
| v/c Ratio | | 0.59 | 0.20 | 0.42 | 0.26 | | | | | 0.35 | 0.37 | 0.11 |
| Uniform Delay, d1 | | 21.6 | 18.4 | 34.0 | 11.3 | | | | | 17.9 | 18.0 | 16.2 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.2 | 0.8 | 0.1 | | | | | 0.3 | 0.2 | 0.4 |
| Delay (s) | | 22.1 | 18.6 | 34.8 | 11.3 | | | | | 18.2 | 18.2 | 16.6 |
| Level of Service | | C | B | C | B | | | | | B | B | B |
| Approach Delay (s) | | 21.3 | | | 17.0 | | | 0.0 | | | 17.9 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.4 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.47 | | |
| Actuated Cycle Length (s) | 80.9 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.6% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 328 | 970 | 0 | 0 | 437 | 260 | 119 | 198 | 539 | 0 | 0 | 0 |
| Future Volume (vph) | 328 | 970 | 0 | 0 | 437 | 260 | 119 | 198 | 539 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.93 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1576 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1576 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 357 | 1054 | 0 | 0 | 475 | 283 | 129 | 215 | 586 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 18 | 36 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 357 | 1054 | 0 | 0 | 475 | 53 | 116 | 403 | 357 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 13.2 | 34.1 | | | 16.4 | 16.4 | 43.7 | 43.7 | 43.7 | | | |
| Effective Green, g (s) | 13.2 | 34.1 | | | 16.4 | 16.4 | 43.7 | 43.7 | 43.7 | | | |
| Actuated g/C Ratio | 0.15 | 0.39 | | | 0.19 | 0.19 | 0.50 | 0.50 | 0.50 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 522 | 1390 | | | 668 | 299 | 846 | 793 | 757 | | | |
| v/s Ratio Prot | 0.10 | c0.30 | | | 0.13 | | 0.07 | c0.26 | | | | |
| v/s Ratio Perm | | | | | | 0.03 | | | 0.24 | | | |
| v/c Ratio | 0.68 | 0.76 | | | 0.71 | 0.18 | 0.14 | 0.51 | 0.47 | | | |
| Uniform Delay, d1 | 34.8 | 22.8 | | | 33.0 | 29.5 | 11.5 | 14.4 | 14.0 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 3.7 | 2.4 | | | 3.6 | 0.3 | 0.1 | 0.5 | 2.1 | | | |
| Delay (s) | 38.5 | 25.2 | | | 36.6 | 29.8 | 11.6 | 14.9 | 16.1 | | | |
| Level of Service | D | C | | | D | C | B | B | B | | | |
| Approach Delay (s) | | 28.6 | | | 34.0 | | | 15.0 | | | 0.0 | |
| Approach LOS | | C | | | C | | | B | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 25.8 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.66 | | |
| Actuated Cycle Length (s) | 86.8 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.6% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 94 | 458 | 50 | 11 | 307 | 100 | 38 | 194 | 10 | 103 | 116 | 136 |
| Future Volume (vph) | 94 | 458 | 50 | 11 | 307 | 100 | 38 | 194 | 10 | 103 | 116 | 136 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 0.95 | |
| Frt | 1.00 | 0.99 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 0.92 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3487 | | 1770 | 3409 | | 1770 | 1849 | | 1770 | 3252 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3487 | | 1770 | 3409 | | 1770 | 1849 | | 1770 | 3252 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 102 | 498 | 54 | 12 | 334 | 109 | 41 | 211 | 11 | 112 | 126 | 148 |
| RTOR Reduction (vph) | 0 | 8 | 0 | 0 | 31 | 0 | 0 | 2 | 0 | 0 | 125 | 0 |
| Lane Group Flow (vph) | 102 | 544 | 0 | 12 | 412 | 0 | 41 | 220 | 0 | 112 | 149 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | |
| Actuated Green, G (s) | 12.5 | 35.7 | | 10.5 | 33.7 | | 11.9 | 15.8 | | 10.0 | 13.9 | |
| Effective Green, g (s) | 12.5 | 35.7 | | 10.5 | 33.7 | | 11.9 | 15.8 | | 10.0 | 13.9 | |
| Actuated g/C Ratio | 0.14 | 0.40 | | 0.12 | 0.37 | | 0.13 | 0.18 | | 0.11 | 0.15 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 245 | 1383 | | 206 | 1276 | | 234 | 324 | | 196 | 502 | |
| v/s Ratio Prot | c0.06 | c0.16 | | 0.01 | 0.12 | | 0.02 | c0.12 | | c0.06 | 0.05 | |
| v/s Ratio Perm | | | | | | | | | | | | |
| v/c Ratio | 0.42 | 0.39 | | 0.06 | 0.32 | | 0.18 | 0.68 | | 0.57 | 0.30 | |
| Uniform Delay, d1 | 35.4 | 19.4 | | 35.4 | 20.0 | | 34.7 | 34.7 | | 38.0 | 33.7 | |
| Progression Factor | 1.00 | 1.00 | | 0.78 | 0.62 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 5.1 | 0.8 | | 0.5 | 0.7 | | 0.4 | 5.5 | | 4.0 | 0.3 | |
| Delay (s) | 40.6 | 20.3 | | 28.1 | 13.1 | | 35.0 | 40.2 | | 41.9 | 34.0 | |
| Level of Service | D | C | | C | B | | D | D | | D | C | |
| Approach Delay (s) | | 23.4 | | | 13.5 | | | 39.4 | | | 36.3 | |
| Approach LOS | | C | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.1 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.49 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 49.9% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 145 | 417 | 13 | 66 | 321 | 115 | 2 | 116 | 156 | 62 | 33 | 101 |
| Future Volume (vph) | 145 | 417 | 13 | 66 | 321 | 115 | 2 | 116 | 156 | 62 | 33 | 101 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.96 | | | 1.00 | 0.85 | 1.00 | 0.89 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3523 | | 1770 | 3399 | | | 1861 | 1583 | 1770 | 1652 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.59 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3523 | | 1770 | 3399 | | | 1854 | 1583 | 1097 | 1652 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 158 | 453 | 14 | 72 | 349 | 125 | 2 | 126 | 170 | 67 | 36 | 110 |
| RTOR Reduction (vph) | 0 | 1 | 0 | 0 | 27 | 0 | 0 | 0 | 148 | 0 | 96 | 0 |
| Lane Group Flow (vph) | 158 | 466 | 0 | 72 | 447 | 0 | 0 | 128 | 22 | 67 | 50 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 15.2 | 56.9 | | 7.9 | 49.6 | | | 11.7 | 11.7 | 11.7 | 11.7 | |
| Effective Green, g (s) | 15.2 | 56.9 | | 7.9 | 49.6 | | | 11.7 | 11.7 | 11.7 | 11.7 | |
| Actuated g/C Ratio | 0.17 | 0.63 | | 0.09 | 0.55 | | | 0.13 | 0.13 | 0.13 | 0.13 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 298 | 2227 | | 155 | 1873 | | | 241 | 205 | 142 | 214 | |
| v/s Ratio Prot | c0.09 | 0.13 | | 0.04 | c0.13 | | | | | | 0.03 | |
| v/s Ratio Perm | | | | | | | | c0.07 | 0.01 | 0.06 | | |
| v/c Ratio | 0.53 | 0.21 | | 0.46 | 0.24 | | | 0.53 | 0.11 | 0.47 | 0.24 | |
| Uniform Delay, d1 | 34.1 | 7.0 | | 39.0 | 10.4 | | | 36.6 | 34.5 | 36.3 | 35.1 | |
| Progression Factor | 1.36 | 0.32 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 1.7 | 0.2 | | 2.2 | 0.3 | | | 2.2 | 0.2 | 2.5 | 0.6 | |
| Delay (s) | 48.1 | 2.5 | | 41.2 | 10.7 | | | 38.8 | 34.8 | 38.8 | 35.7 | |
| Level of Service | D | A | | D | B | | | D | C | D | D | |
| Approach Delay (s) | | 14.0 | | | 14.8 | | | 36.5 | | | 36.7 | |
| Approach LOS | | B | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 21.1 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.34 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 41.9% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 433 | 418 | 112 | 377 | 0 | 0 | 0 | 0 | 322 | 0 | 174 |
| Future Volume (vph) | 0 | 433 | 418 | 112 | 377 | 0 | 0 | 0 | 0 | 322 | 0 | 174 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.93 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3279 | | 1610 | 3385 | | | | | 1681 | 1681 | 1583 |
| Flt Permitted | | 1.00 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3279 | | 1610 | 3193 | | | | | 1681 | 1681 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 471 | 454 | 122 | 410 | 0 | 0 | 0 | 0 | 350 | 0 | 189 |
| RTOR Reduction (vph) | 0 | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 |
| Lane Group Flow (vph) | 0 | 679 | 0 | 110 | 422 | 0 | 0 | 0 | 0 | 175 | 175 | 68 |
| Turn Type | | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 20.3 | | 7.8 | 32.6 | | | | | 23.4 | 23.4 | 23.4 |
| Effective Green, g (s) | | 20.3 | | 7.8 | 32.6 | | | | | 23.4 | 23.4 | 23.4 |
| Actuated g/C Ratio | | 0.31 | | 0.12 | 0.50 | | | | | 0.36 | 0.36 | 0.36 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1024 | | 193 | 1624 | | | | | 605 | 605 | 569 |
| v/s Ratio Prot | | c0.21 | | c0.07 | 0.03 | | | | | c0.10 | 0.10 | |
| v/s Ratio Perm | | | | | 0.10 | | | | | | | 0.04 |
| v/c Ratio | | 0.66 | | 0.57 | 0.26 | | | | | 0.29 | 0.29 | 0.12 |
| Uniform Delay, d1 | | 19.4 | | 27.0 | 9.3 | | | | | 14.9 | 14.9 | 13.9 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 1.6 | | 3.8 | 0.1 | | | | | 0.3 | 0.3 | 0.4 |
| Delay (s) | | 21.0 | | 30.8 | 9.4 | | | | | 15.1 | 15.1 | 14.3 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 21.0 | | | 13.8 | | | 0.0 | | | 14.9 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 17.4 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.48 | | |
| Actuated Cycle Length (s) | 65.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.0% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 266 | 396 | 267 | 139 | 82 | 29 | 167 | 914 | 370 | 55 | 1349 | 216 |
| Future Volume (veh/h) | 266 | 396 | 267 | 139 | 82 | 29 | 167 | 914 | 370 | 55 | 1349 | 216 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 289 | 430 | 290 | 151 | 89 | 32 | 182 | 993 | 402 | 60 | 1466 | 235 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 758 | 780 | 349 | 242 | 249 | 111 | 250 | 2524 | 786 | 136 | 2356 | 733 |
| Arrive On Green | 0.22 | 0.22 | 0.22 | 0.07 | 0.07 | 0.07 | 0.07 | 0.50 | 0.50 | 0.04 | 0.46 | 0.46 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 289 | 430 | 290 | 151 | 89 | 32 | 182 | 993 | 402 | 60 | 1466 | 235 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 7.4 | 11.2 | 18.1 | 4.4 | 2.5 | 2.0 | 5.4 | 12.7 | 17.8 | 1.8 | 22.6 | 9.7 |
| Cycle Q Clear(g_c), s | 7.4 | 11.2 | 18.1 | 4.4 | 2.5 | 2.0 | 5.4 | 12.7 | 17.8 | 1.8 | 22.6 | 9.7 |
| 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 | 758 | 780 | 349 | 242 | 249 | 111 | 250 | 2524 | 786 | 136 | 2356 | 733 |
| V/C Ratio(X) | 0.38 | 0.55 | 0.83 | 0.62 | 0.36 | 0.29 | 0.73 | 0.39 | 0.51 | 0.44 | 0.62 | 0.32 |
| Avail Cap(c_a), veh/h | 879 | 904 | 404 | 614 | 631 | 282 | 381 | 2524 | 786 | 182 | 2356 | 733 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 35.9 | 38.6 | 46.9 | 46.0 | 45.8 | 47.1 | 16.4 | 17.6 | 48.7 | 21.0 | 17.6 |
| Incr Delay (d2), s/veh | 0.3 | 0.6 | 12.2 | 2.6 | 0.9 | 1.4 | 4.0 | 0.5 | 2.4 | 2.2 | 1.2 | 1.2 |
| 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 | 3.6 | 5.6 | 9.1 | 2.2 | 1.2 | 0.9 | 2.7 | 6.0 | 8.2 | 0.9 | 10.7 | 4.5 |
| LnGrp Delay(d),s/veh | 34.8 | 36.5 | 50.8 | 49.5 | 46.9 | 47.2 | 51.1 | 16.8 | 20.0 | 50.9 | 22.3 | 18.7 |
| LnGrp LOS | C | D | D | D | D | D | D | B | C | D | C | B |
| Approach Vol, veh/h | | 1009 | | | 272 | | | 1577 | | | 1761 | |
| Approach Delay, s/veh | | 40.1 | | | 48.4 | | | 21.6 | | | 22.8 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 56.0 | | 27.4 | 12.0 | 52.6 | | 11.8 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.5 | 51.5 | | 26.5 | 11.5 | 45.5 | | 18.5 |
| Max Q Clear Time (g_c+I1), s | 3.8 | 19.8 | | 20.1 | 7.4 | 24.6 | | 6.4 |
| Green Ext Time (p_c), s | 0.0 | 10.5 | | 2.7 | 0.2 | 12.1 | | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 27.7 |
| HCM 2010 LOS | C |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 509 | 754 | 915 | 281 | 0 | 1726 |
| Future Volume (veh/h) | 509 | 754 | 915 | 281 | 0 | 1726 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 553 | 820 | 995 | 305 | 0 | 1876 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1176 | 952 | 2227 | 682 | 0 | 2933 |
| Arrive On Green | 0.34 | 0.34 | 0.58 | 0.58 | 0.00 | 0.58 |
| Sat Flow, veh/h | 3442 | 2787 | 4030 | 1182 | 0 | 5421 |
| Grp Volume(v), veh/h | 553 | 820 | 873 | 427 | 0 | 1876 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1654 | 0 | 1695 |
| Q Serve(g_s), s | 13.9 | 30.2 | 16.2 | 16.2 | 0.0 | 27.2 |
| Cycle Q Clear(g_c), s | 13.9 | 30.2 | 16.2 | 16.2 | 0.0 | 27.2 |
| Prop In Lane | 1.00 | 1.00 | | 0.71 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1176 | 952 | 1955 | 954 | 0 | 2933 |
| V/C Ratio(X) | 0.47 | 0.86 | 0.45 | 0.45 | 0.00 | 0.64 |
| Avail Cap(c_a), veh/h | 1485 | 1202 | 1955 | 954 | 0 | 2933 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.4 | 33.8 | 13.3 | 13.3 | 0.0 | 15.6 |
| Incr Delay (d2), s/veh | 0.3 | 5.4 | 0.7 | 1.5 | 0.0 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.7 | 12.3 | 7.7 | 7.8 | 0.0 | 13.0 |
| LnGrp Delay(d),s/veh | 28.7 | 39.2 | 14.0 | 14.8 | 0.0 | 16.7 |
| LnGrp LOS | C | D | B | B | | B |
| Approach Vol, veh/h | 1373 | | 1300 | | | 1876 |
| Approach Delay, s/veh | 35.0 | | 14.3 | | | 16.7 |
| Approach LOS | D | | B | | | B |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 68.0 | | | | 68.0 | | 42.1 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.5 | | | | 63.5 | | 47.5 |
| Max Q Clear Time (g_c+I1), s | | 18.2 | | | | 29.2 | | 32.2 |
| Green Ext Time (p_c), s | | 12.7 | | | | 20.0 | | 5.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 21.5 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 408 | 961 | 73 | 28 | 485 | 112 | 153 | 99 | 43 | 128 | 64 | 74 |
| Future Volume (veh/h) | 408 | 961 | 73 | 28 | 485 | 112 | 153 | 99 | 43 | 128 | 64 | 74 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 443 | 1045 | 79 | 30 | 527 | 122 | 166 | 108 | 47 | 139 | 70 | 80 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 493 | 1580 | 119 | 53 | 645 | 149 | 286 | 415 | 181 | 322 | 149 | 533 |
| Arrive On Green | 0.28 | 0.47 | 0.47 | 0.03 | 0.23 | 0.23 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1774 | 3336 | 252 | 1774 | 2857 | 659 | 1232 | 1232 | 536 | 747 | 442 | 1583 |
| Grp Volume(v), veh/h | 443 | 554 | 570 | 30 | 326 | 323 | 166 | 0 | 155 | 209 | 0 | 80 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1818 | 1774 | 1770 | 1747 | 1232 | 0 | 1768 | 1189 | 0 | 1583 |
| Q Serve(g_s), s | 20.3 | 20.3 | 20.3 | 1.4 | 14.8 | 14.9 | 11.0 | 0.0 | 5.4 | 9.3 | 0.0 | 3.0 |
| Cycle Q Clear(g_c), s | 20.3 | 20.3 | 20.3 | 1.4 | 14.8 | 14.9 | 25.7 | 0.0 | 5.4 | 14.7 | 0.0 | 3.0 |
| Prop In Lane | 1.00 | | 0.14 | 1.00 | | 0.38 | 1.00 | | 0.30 | 0.67 | | 1.00 |
| Lane Grp Cap(c), veh/h | 493 | 838 | 861 | 53 | 399 | 394 | 286 | 0 | 596 | 471 | 0 | 533 |
| V/C Ratio(X) | 0.90 | 0.66 | 0.66 | 0.57 | 0.81 | 0.82 | 0.58 | 0.00 | 0.26 | 0.44 | 0.00 | 0.15 |
| Avail Cap(c_a), veh/h | 723 | 1090 | 1120 | 124 | 492 | 485 | 286 | 0 | 596 | 471 | 0 | 533 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.4 | 17.1 | 17.1 | 40.5 | 31.1 | 31.1 | 34.3 | 0.0 | 20.4 | 24.7 | 0.0 | 19.6 |
| Incr Delay (d2), s/veh | 10.4 | 1.0 | 0.9 | 9.1 | 8.5 | 9.0 | 8.4 | 0.0 | 1.1 | 3.0 | 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 | 11.4 | 10.1 | 10.4 | 0.8 | 8.2 | 8.2 | 4.4 | 0.0 | 2.8 | 4.5 | 0.0 | 1.4 |
| LnGrp Delay(d),s/veh | 39.8 | 18.0 | 18.0 | 49.6 | 39.6 | 40.1 | 42.6 | 0.0 | 21.4 | 27.7 | 0.0 | 20.2 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | C |
| Approach Vol, veh/h | | 1567 | | | 679 | | | 321 | | | 289 | |
| Approach Delay, s/veh | | 24.2 | | | 40.3 | | | 32.4 | | | 25.6 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 33.0 | 7.0 | 44.6 | | 33.0 | 28.0 | 23.6 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 28.5 | 5.9 | 52.1 | | 28.5 | 34.5 | 23.5 |
| Max Q Clear Time (g_c+I1), s | | 27.7 | 3.4 | 22.3 | | 16.7 | 22.3 | 16.9 |
| Green Ext Time (p_c), s | | 0.1 | 0.0 | 9.0 | | 1.2 | 1.2 | 2.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 29.1 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 60 | 847 | 47 | 22 | 575 | 22 | 63 | 25 | 65 | 11 | 2 | 13 |
| Future Volume (veh/h) | 60 | 847 | 47 | 22 | 575 | 22 | 63 | 25 | 65 | 11 | 2 | 13 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 65 | 921 | 51 | 24 | 625 | 24 | 68 | 27 | 71 | 12 | 2 | 14 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 84 | 1098 | 61 | 45 | 1043 | 40 | 164 | 65 | 171 | 371 | 389 | 331 |
| Arrive On Green | 0.05 | 0.32 | 0.32 | 0.03 | 0.30 | 0.30 | 0.24 | 0.24 | 0.24 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3410 | 189 | 1774 | 3475 | 133 | 696 | 276 | 727 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 65 | 478 | 494 | 24 | 318 | 331 | 166 | 0 | 0 | 12 | 2 | 14 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1829 | 1774 | 1770 | 1839 | 1700 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 3.1 | 21.7 | 21.7 | 1.2 | 13.3 | 13.3 | 7.2 | 0.0 | 0.0 | 0.5 | 0.1 | 0.6 |
| Cycle Q Clear(g_c), s | 3.1 | 21.7 | 21.7 | 1.2 | 13.3 | 13.3 | 7.2 | 0.0 | 0.0 | 0.5 | 0.1 | 0.6 |
| Prop In Lane | 1.00 | | 0.10 | 1.00 | | 0.07 | 0.41 | | 0.43 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 84 | 570 | 589 | 45 | 531 | 552 | 401 | 0 | 0 | 371 | 389 | 331 |
| V/C Ratio(X) | 0.78 | 0.84 | 0.84 | 0.53 | 0.60 | 0.60 | 0.41 | 0.00 | 0.00 | 0.03 | 0.01 | 0.04 |
| Avail Cap(c_a), veh/h | 186 | 671 | 693 | 117 | 601 | 625 | 401 | 0 | 0 | 371 | 389 | 331 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.8 | 27.3 | 27.3 | 41.7 | 25.8 | 25.9 | 28.0 | 0.0 | 0.0 | 27.3 | 27.1 | 27.3 |
| Incr Delay (d2), s/veh | 14.1 | 8.1 | 7.9 | 9.5 | 1.3 | 1.3 | 3.1 | 0.0 | 0.0 | 0.2 | 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 | 1.9 | 11.9 | 12.3 | 0.7 | 6.6 | 6.9 | 3.7 | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 |
| LnGrp Delay(d),s/veh | 54.9 | 35.4 | 35.1 | 51.2 | 27.2 | 27.1 | 31.2 | 0.0 | 0.0 | 27.4 | 27.1 | 27.6 |
| LnGrp LOS | D | D | D | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 1037 | | | 673 | | | 166 | | | 28 | |
| Approach Delay, s/veh | | 36.5 | | | 28.0 | | | 31.2 | | | 27.5 | |
| Approach LOS | | D | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 24.9 | 6.7 | 32.4 | | 22.6 | 8.6 | 30.5 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 20.4 | 5.7 | 32.8 | | 18.1 | 9.1 | 29.4 |
| Max Q Clear Time (g_c+I1), s | | 9.2 | 3.2 | 23.7 | | 2.6 | 5.1 | 15.3 |
| Green Ext Time (p_c), s | | 0.6 | 0.0 | 4.2 | | 0.0 | 0.0 | 3.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 32.9 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 199 | 454 | 225 | 222 | 257 | 120 | 205 | 1069 | 117 | 211 | 758 | 98 |
| Future Volume (veh/h) | 199 | 454 | 225 | 222 | 257 | 120 | 205 | 1069 | 117 | 211 | 758 | 98 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 216 | 493 | 245 | 241 | 279 | 130 | 223 | 1162 | 127 | 229 | 824 | 107 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 245 | 656 | 293 | 364 | 362 | 164 | 278 | 2424 | 755 | 284 | 2432 | 757 |
| Arrive On Green | 0.14 | 0.19 | 0.19 | 0.11 | 0.15 | 0.15 | 0.08 | 0.48 | 0.48 | 0.08 | 0.48 | 0.48 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2368 | 1075 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 216 | 493 | 245 | 241 | 207 | 202 | 223 | 1162 | 127 | 229 | 824 | 107 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1673 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 14.3 | 15.8 | 14.5 | 8.1 | 13.4 | 14.0 | 7.6 | 18.6 | 3.6 | 7.8 | 12.1 | 2.7 |
| Cycle Q Clear(g_c), s | 14.3 | 15.8 | 14.5 | 8.1 | 13.4 | 14.0 | 7.6 | 18.6 | 3.6 | 7.8 | 12.1 | 2.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.64 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 245 | 656 | 293 | 364 | 271 | 256 | 278 | 2424 | 755 | 284 | 2432 | 757 |
| V/C Ratio(X) | 0.88 | 0.75 | 0.84 | 0.66 | 0.76 | 0.79 | 0.80 | 0.48 | 0.17 | 0.81 | 0.34 | 0.14 |
| Avail Cap(c_a), veh/h | 303 | 1304 | 583 | 364 | 524 | 495 | 301 | 2424 | 755 | 301 | 2432 | 757 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.54 | 0.54 | 0.54 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 0.75 | 0.75 | 0.75 |
| Uniform Delay (d), s/veh | 50.8 | 46.3 | 30.8 | 51.6 | 48.7 | 49.0 | 54.2 | 21.3 | 7.7 | 54.1 | 19.5 | 6.1 |
| Incr Delay (d2), s/veh | 13.2 | 1.0 | 3.5 | 4.3 | 4.3 | 5.2 | 13.5 | 0.7 | 0.5 | 11.0 | 0.3 | 0.3 |
| 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 | 7.9 | 7.8 | 6.8 | 4.1 | 6.9 | 6.8 | 4.1 | 8.9 | 2.3 | 4.2 | 5.7 | 1.9 |
| LnGrp Delay(d),s/veh | 63.9 | 47.2 | 34.3 | 55.9 | 53.0 | 54.2 | 67.7 | 22.0 | 8.1 | 65.2 | 19.8 | 6.4 |
| LnGrp LOS | E | D | C | E | D | D | E | C | A | E | B | A |
| Approach Vol, veh/h | | 954 | | | 650 | | | 1512 | | | 1160 | |
| Approach Delay, s/veh | | 47.7 | | | 54.5 | | | 27.6 | | | 27.5 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 21.1 | 22.9 | 14.4 | 61.7 | 17.2 | 26.7 | 14.2 | 61.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 35.5 | 10.5 | 35.5 | 11.8 | 44.2 | 10.5 | 35.5 |
| Max Q Clear Time (g_c+I1), s | 16.3 | 16.0 | 9.8 | 20.6 | 10.1 | 17.8 | 9.6 | 14.1 |
| Green Ext Time (p_c), s | 0.2 | 2.4 | 0.1 | 7.6 | 0.1 | 4.4 | 0.1 | 6.3 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 36.1 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 265 | 502 | 0 | 0 | 153 | 146 | 290 | 4 | 0 | 50 | 0 | 46 |
| Future Volume (veh/h) | 265 | 502 | 0 | 0 | 153 | 146 | 290 | 4 | 0 | 50 | 0 | 46 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 288 | 546 | 0 | 0 | 166 | 159 | 315 | 4 | 0 | 54 | 0 | 50 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 424 | 674 | 0 | 0 | 545 | 254 | 0 | 661 | 0 | 89 | 0 | 0 |
| Arrive On Green | 0.12 | 0.36 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.35 | 0.00 | 0.05 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 54 | |
| Grp Volume(v), veh/h | 288 | 546 | 0 | 0 | 166 | 159 | 0 | 4 | 0 | 54 | 33.4 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | C | |
| Q Serve(g_s), s | 4.6 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Cycle Q Clear(g_c), s | 4.6 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 424 | 674 | 0 | 0 | 545 | 254 | 0 | 661 | 0 | 89 | | |
| V/C Ratio(X) | 0.68 | 0.81 | 0.00 | 0.00 | 0.30 | 0.63 | 0.00 | 0.01 | 0.00 | 0.61 | | |
| Avail Cap(c_a), veh/h | 804 | 1241 | 0 | 0 | 1202 | 561 | 0 | 661 | 0 | 230 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 24.3 | 16.7 | 0.0 | 0.0 | 21.4 | 22.6 | 0.0 | 12.1 | 0.0 | 26.9 | | |
| Incr Delay (d2), s/veh | 1.9 | 2.4 | 0.0 | 0.0 | 0.3 | 2.5 | 0.0 | 0.0 | 0.0 | 6.5 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 2.3 | 8.2 | 0.0 | 0.0 | 1.2 | 2.5 | 0.0 | 0.0 | 0.0 | 1.0 | | |
| LnGrp Delay(d),s/veh | 26.2 | 19.1 | 0.0 | 0.0 | 21.7 | 25.1 | 0.0 | 12.1 | 0.0 | 33.4 | | |
| LnGrp LOS | C | B | | | C | C | | B | | C | | |
| Approach Vol, veh/h | | 834 | | | 325 | | | 4 | | | | |
| Approach Delay, s/veh | | 21.5 | | | 23.4 | | | 12.1 | | | | |
| Approach LOS | | C | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 7.4 | 25.0 | | 25.4 | 0.0 | | 11.6 | 13.8 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 20.5 | | 38.5 | 5.0 | | 13.5 | 20.5 |
| Max Q Clear Time (g_c+I1), s | 3.7 | 2.1 | | 17.3 | 0.0 | | 6.6 | 7.4 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 3.6 | 0.0 | | 0.6 | 1.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.5 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.2 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 33 | 65 | 12 | 21 | 45 | 17 | 5 | 98 | 4 | 14 | 45 | 6 |
| Future Vol, veh/h | 33 | 65 | 12 | 21 | 45 | 17 | 5 | 98 | 4 | 14 | 45 | 6 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 36 | 71 | 13 | 23 | 49 | 18 | 5 | 107 | 4 | 15 | 49 | 7 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.3 | 8 | 8.3 | 8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 30% | 25% | 22% |
| Vol Thru, % | 92% | 59% | 54% | 69% |
| Vol Right, % | 4% | 11% | 20% | 9% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 107 | 110 | 83 | 65 |
| LT Vol | 5 | 33 | 21 | 14 |
| Through Vol | 98 | 65 | 45 | 45 |
| RT Vol | 4 | 12 | 17 | 6 |
| Lane Flow Rate | 116 | 120 | 90 | 71 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.145 | 0.148 | 0.111 | 0.089 |
| Departure Headway (Hd) | 4.485 | 4.464 | 4.432 | 4.537 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 801 | 805 | 810 | 791 |
| Service Time | 2.503 | 2.484 | 2.451 | 2.557 |
| HCM Lane V/C Ratio | 0.145 | 0.149 | 0.111 | 0.09 |
| HCM Control Delay | 8.3 | 8.3 | 8 | 8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.5 | 0.5 | 0.4 | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 53 | 13 | 15 | 68 | 2 | 11 | 4 | 52 | 0 | 6 | 1 |
| Future Vol, veh/h | 0 | 53 | 13 | 15 | 68 | 2 | 11 | 4 | 52 | 0 | 6 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 58 | 14 | 16 | 74 | 2 | 12 | 4 | 57 | 0 | 7 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 76 | 0 | 0 | 72 | 0 | 0 | 176 | 173 | 65 | 203 | 179 | 75 |
| Stage 1 | - | - | - | - | - | - | 65 | 65 | - | 107 | 107 | - |
| Stage 2 | - | - | - | - | - | - | 111 | 108 | - | 96 | 72 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1523 | - | - | 1528 | - | - | 786 | 720 | 999 | 755 | 715 | 986 |
| Stage 1 | - | - | - | - | - | - | 946 | 841 | - | 898 | 807 | - |
| Stage 2 | - | - | - | - | - | - | 894 | 806 | - | 911 | 835 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1523 | - | - | 1528 | - | - | 773 | 712 | 999 | 703 | 707 | 986 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 773 | 712 | - | 703 | 707 | - |
| Stage 1 | - | - | - | - | - | - | 946 | 841 | - | 898 | 798 | - |
| Stage 2 | - | - | - | - | - | - | 876 | 797 | - | 855 | 835 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 1.3 | 9.2 | 9.9 |
| HCM LOS | | | A | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 932 | 1523 | - | - | 1528 | - | - | 737 |
| HCM Lane V/C Ratio | 0.078 | - | - | - | 0.011 | - | - | 0.01 |
| HCM Control Delay (s) | 9.2 | 0 | - | - | 7.4 | 0 | - | 9.9 |
| HCM Lane LOS | A | A | - | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0.3 | 0 | - | - | 0 | - | - | 0 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 111 | 0 | 1 | 86 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Future Vol, veh/h | 0 | 111 | 0 | 1 | 86 | 1 | 0 | 0 | 0 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 121 | 0 | 1 | 93 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 94 | 0 | 0 | 121 | 0 | 0 | 217 | 217 | 121 | 217 | 217 | 94 |
| Stage 1 | - | - | - | - | - | - | 121 | 121 | - | 96 | 96 | - |
| Stage 2 | - | - | - | - | - | - | 96 | 96 | - | 121 | 121 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1500 | - | - | 1467 | - | - | 739 | 681 | 930 | 739 | 681 | 963 |
| Stage 1 | - | - | - | - | - | - | 883 | 796 | - | 911 | 815 | - |
| Stage 2 | - | - | - | - | - | - | 911 | 815 | - | 883 | 796 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1500 | - | - | 1467 | - | - | 738 | 680 | 930 | 738 | 680 | 963 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 738 | 680 | - | 738 | 680 | - |
| Stage 1 | - | - | - | - | - | - | 883 | 796 | - | 911 | 814 | - |
| Stage 2 | - | - | - | - | - | - | 910 | 814 | - | 883 | 796 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 0.1 | 0 | 0 |
| HCM LOS | | | A | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1500 | - | - | 1467 | - | - | - |
| HCM Lane V/C Ratio | - | - | - | - | 0.001 | - | - | - |
| HCM Control Delay (s) | 0 | 0 | - | - | 7.5 | 0 | - | 0 |
| HCM Lane LOS | A | A | - | - | A | A | - | A |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 61 | 66 | 1415 | 1274 | 21 |
| Future Vol, veh/h | 20 | 61 | 66 | 1415 | 1274 | 21 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 250 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 66 | 72 | 1538 | 1385 | 23 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 2156 | 704 | 1408 | 0 | - | 0 |
| Stage 1 | 1397 | - | - | - | - | - |
| Stage 2 | 759 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | 5.34 | - | - | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | 3.12 | - | - | - |
| Pot Cap-1 Maneuver | 77 | 325 | 247 | - | - | - |
| Stage 1 | 137 | - | - | - | - | - |
| Stage 2 | 384 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 55 | 325 | 247 | - | - | - |
| Mov Cap-2 Maneuver | 55 | - | - | - | - | - |
| Stage 1 | 97 | - | - | - | - | - |
| Stage 2 | 384 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 60.7 | 1.1 | 0 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 247 | - | 147 | - | - |
| HCM Lane V/C Ratio | 0.29 | - | 0.599 | - | - |
| HCM Control Delay (s) | 25.4 | - | 60.7 | - | - |
| HCM Lane LOS | D | - | F | - | - |
| HCM 95th %tile Q(veh) | 1.2 | - | 3.1 | - | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 17 | 16 | 22 | 24 | 8 | 18 | 7 |
| Future Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 17 | 16 | 22 | 24 | 8 | 18 | 7 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 71 | 34 | 24 | 36 | 18 | 17 | 24 | 26 | 9 | 20 | 8 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8 | 7.7 | 7.7 | 7.6 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 26% | 29% | 31% | 24% |
| Vol Thru, % | 35% | 48% | 46% | 55% |
| Vol Right, % | 39% | 23% | 24% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 62 | 135 | 72 | 33 |
| LT Vol | 16 | 39 | 22 | 8 |
| Through Vol | 22 | 65 | 33 | 18 |
| RT Vol | 24 | 31 | 17 | 7 |
| Lane Flow Rate | 67 | 147 | 78 | 36 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.08 | 0.167 | 0.09 | 0.044 |
| Departure Headway (Hd) | 4.287 | 4.094 | 4.146 | 4.423 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 840 | 864 | 850 | 814 |
| Service Time | 2.288 | 2.175 | 2.242 | 2.425 |
| HCM Lane V/C Ratio | 0.08 | 0.17 | 0.092 | 0.044 |
| HCM Control Delay | 7.7 | 8 | 7.7 | 7.6 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.6 | 0.3 | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 109 | 81 | 1375 | 37 | 119 | 1134 |
| Future Volume (veh/h) | 109 | 81 | 1375 | 37 | 119 | 1134 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 118 | 88 | 1495 | 40 | 129 | 1233 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 140 | 104 | 3808 | 102 | 302 | 3802 |
| Arrive On Green | 0.15 | 0.15 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 962 | 718 | 5260 | 136 | 337 | 5253 |
| Grp Volume(v), veh/h | 207 | 0 | 995 | 540 | 129 | 1233 |
| Grp Sat Flow(s),veh/h/ln | 1688 | 0 | 1695 | 1839 | 337 | 1695 |
| Q Serve(g_s), s | 10.1 | 0.0 | 8.8 | 8.8 | 18.7 | 6.8 |
| Cycle Q Clear(g_c), s | 10.1 | 0.0 | 8.8 | 8.8 | 27.5 | 6.8 |
| Prop In Lane | 0.57 | 0.43 | | 0.07 | 1.00 | |
| Lane Grp Cap(c), veh/h | 246 | 0 | 2535 | 1375 | 302 | 3802 |
| V/C Ratio(X) | 0.84 | 0.00 | 0.39 | 0.39 | 0.43 | 0.32 |
| Avail Cap(c_a), veh/h | 361 | 0 | 2535 | 1375 | 302 | 3802 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.1 | 0.0 | 3.8 | 3.8 | 8.7 | 3.5 |
| Incr Delay (d2), s/veh | 11.2 | 0.0 | 0.5 | 0.8 | 4.4 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.4 | 0.0 | 4.2 | 4.7 | 2.1 | 3.2 |
| LnGrp Delay(d),s/veh | 46.3 | 0.0 | 4.3 | 4.6 | 13.1 | 3.8 |
| LnGrp LOS | D | | A | A | B | A |
| Approach Vol, veh/h | 207 | | 1535 | | | 1362 |
| Approach Delay, s/veh | 46.3 | | 4.4 | | | 4.7 |
| Approach LOS | D | | A | | | A |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 67.5 | | | | 67.5 | | 16.8 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.0 | | | | 63.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 10.8 | | | | 29.5 | | 12.1 |
| Green Ext Time (p_c), s | | 16.5 | | | | 15.3 | | 0.3 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 7.3 |
| HCM 2010 LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1181 | 13 | 50 | 1045 | 149 |
| Future Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1181 | 13 | 50 | 1045 | 149 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 154 | 85 | 134 | 58 | 100 | 17 | 136 | 1284 | 14 | 54 | 1136 | 162 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 196 | 108 | 267 | 78 | 134 | 183 | 172 | 2191 | 24 | 81 | 1671 | 238 |
| Arrive On Green | 0.17 | 0.17 | 0.17 | 0.12 | 0.12 | 0.12 | 0.10 | 0.42 | 0.42 | 0.05 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1163 | 642 | 1583 | 671 | 1158 | 1583 | 1774 | 5186 | 57 | 1774 | 4499 | 641 |
| Grp Volume(v), veh/h | 239 | 0 | 134 | 158 | 0 | 17 | 136 | 839 | 459 | 54 | 856 | 442 |
| Grp Sat Flow(s),veh/h/ln | 1805 | 0 | 1583 | 1829 | 0 | 1583 | 1774 | 1695 | 1853 | 1774 | 1695 | 1750 |
| Q Serve(g_s), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 13.8 | 13.8 | 2.2 | 15.4 | 15.4 |
| Cycle Q Clear(g_c), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 13.8 | 13.8 | 2.2 | 15.4 | 15.4 |
| Prop In Lane | 0.64 | | 1.00 | 0.37 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 0.37 |
| Lane Grp Cap(c), veh/h | 304 | 0 | 267 | 211 | 0 | 183 | 172 | 1432 | 783 | 81 | 1259 | 650 |
| V/C Ratio(X) | 0.79 | 0.00 | 0.50 | 0.75 | 0.00 | 0.09 | 0.79 | 0.59 | 0.59 | 0.67 | 0.68 | 0.68 |
| Avail Cap(c_a), veh/h | 449 | 0 | 394 | 456 | 0 | 394 | 237 | 1432 | 783 | 125 | 1259 | 650 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.9 | 0.0 | 27.4 | 31.1 | 0.0 | 28.7 | 32.1 | 16.1 | 16.1 | 34.1 | 19.2 | 19.2 |
| Incr Delay (d2), s/veh | 5.4 | 0.0 | 1.5 | 5.2 | 0.0 | 0.2 | 11.8 | 1.8 | 3.2 | 9.0 | 3.0 | 5.7 |
| 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 | 5.0 | 0.0 | 2.5 | 3.4 | 0.0 | 0.3 | 3.2 | 6.8 | 7.7 | 1.3 | 7.7 | 8.4 |
| LnGrp Delay(d),s/veh | 34.4 | 0.0 | 28.9 | 36.3 | 0.0 | 28.9 | 43.9 | 17.9 | 19.3 | 43.2 | 22.2 | 24.9 |
| LnGrp LOS | C | | C | D | | C | D | B | B | D | C | C |
| Approach Vol, veh/h | | 373 | | | 175 | | | 1434 | | | 1352 | |
| Approach Delay, s/veh | | 32.4 | | | 35.6 | | | 20.8 | | | 23.9 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 7.8 | 35.2 | | 16.8 | 11.5 | 31.5 | | 12.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.1 | 30.7 | | 18.1 | 9.7 | 26.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 4.2 | 15.8 | | 11.2 | 7.4 | 17.4 | | 8.1 |
| Green Ext Time (p_c), s | 0.0 | 7.7 | | 1.0 | 0.1 | 5.3 | | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 24.1 |
| HCM 2010 LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 263 | 390 | 0 | 1588 | 1423 | 729 |
| Future Volume (vph) | 263 | 390 | 0 | 1588 | 1423 | 729 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.94 | 0.85 | | 1.00 | 0.95 | |
| Flt Protected | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3294 | 1441 | | 5085 | 4827 | |
| Flt Permitted | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3294 | 1441 | | 5085 | 4827 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 286 | 424 | 0 | 1726 | 1547 | 792 |
| RTOR Reduction (vph) | 42 | 42 | 0 | 0 | 47 | 0 |
| Lane Group Flow (vph) | 443 | 183 | 0 | 1726 | 2292 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 24.1 | 24.1 | | 101.7 | 101.7 | |
| Effective Green, g (s) | 24.1 | 24.1 | | 101.7 | 101.7 | |
| Actuated g/C Ratio | 0.18 | 0.18 | | 0.75 | 0.75 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 588 | 257 | | 3836 | 3641 | |
| v/s Ratio Prot | c0.13 | | | 0.34 | c0.47 | |
| v/s Ratio Perm | | 0.13 | | | | |
| v/c Ratio | 0.75 | 0.71 | | 0.45 | 0.63 | |
| Uniform Delay, d1 | 52.5 | 52.1 | | 6.2 | 7.7 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 5.4 | 9.0 | | 0.4 | 0.8 | |
| Delay (s) | 58.0 | 61.1 | | 6.5 | 8.6 | |
| Level of Service | E | E | | A | A | |
| Approach Delay (s) | 59.0 | | | 6.5 | 8.6 | |
| Approach LOS | E | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 15.3 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.65 | | |
| Actuated Cycle Length (s) | 134.8 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 67.4% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 530 | 163 | 414 | 786 | 0 | 0 | 0 | 0 | 216 | 99 | 308 |
| Future Volume (vph) | 0 | 530 | 163 | 414 | 786 | 0 | 0 | 0 | 0 | 216 | 99 | 308 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.92 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2937 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2937 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 576 | 177 | 450 | 854 | 0 | 0 | 0 | 0 | 235 | 108 | 335 |
| RTOR Reduction (vph) | 0 | 0 | 139 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 96 |
| Lane Group Flow (vph) | 0 | 576 | 38 | 450 | 854 | 0 | 0 | 0 | 0 | 176 | 239 | 71 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 15.4 | 15.4 | 14.7 | 34.6 | | | | | 28.8 | 28.8 | 28.8 |
| Effective Green, g (s) | | 15.4 | 15.4 | 14.7 | 34.6 | | | | | 28.8 | 28.8 | 28.8 |
| Actuated g/C Ratio | | 0.21 | 0.21 | 0.20 | 0.48 | | | | | 0.40 | 0.40 | 0.40 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1081 | 336 | 697 | 1691 | | | | | 640 | 1168 | 573 |
| v/s Ratio Prot | | 0.11 | | c0.13 | c0.24 | | | | | c0.11 | 0.08 | |
| v/s Ratio Perm | | | 0.02 | | | | | | | | | 0.05 |
| v/c Ratio | | 0.53 | 0.11 | 0.65 | 0.51 | | | | | 0.28 | 0.20 | 0.12 |
| Uniform Delay, d1 | | 25.3 | 23.0 | 26.5 | 13.0 | | | | | 14.7 | 14.3 | 13.8 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.1 | 2.1 | 0.2 | | | | | 0.2 | 0.1 | 0.4 |
| Delay (s) | | 25.8 | 23.1 | 28.5 | 13.2 | | | | | 15.0 | 14.4 | 14.3 |
| Level of Service | | C | C | C | B | | | | | B | B | B |
| Approach Delay (s) | | 25.2 | | | 18.5 | | | 0.0 | | | 14.5 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.4 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.45 | | |
| Actuated Cycle Length (s) | 72.4 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 70.7% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 203 | 557 | 0 | 0 | 962 | 547 | 253 | 377 | 284 | 0 | 0 | 0 |
| Future Volume (vph) | 203 | 557 | 0 | 0 | 962 | 547 | 253 | 377 | 284 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.99 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1673 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1673 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 221 | 605 | 0 | 0 | 1046 | 595 | 275 | 410 | 309 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 3 | 123 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 221 | 605 | 0 | 0 | 1046 | 521 | 247 | 466 | 155 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 9.6 | 51.0 | | | 36.9 | 36.9 | 24.7 | 24.7 | 24.7 | | | |
| Effective Green, g (s) | 9.6 | 51.0 | | | 36.9 | 36.9 | 24.7 | 24.7 | 24.7 | | | |
| Actuated g/C Ratio | 0.11 | 0.60 | | | 0.44 | 0.44 | 0.29 | 0.29 | 0.29 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 389 | 2130 | | | 1541 | 689 | 490 | 487 | 438 | | | |
| v/s Ratio Prot | c0.06 | 0.17 | | | 0.30 | | 0.15 | c0.28 | | | | |
| v/s Ratio Perm | | | | | | c0.33 | | | 0.10 | | | |
| v/c Ratio | 0.57 | 0.28 | | | 0.68 | 0.76 | 0.50 | 0.96 | 0.35 | | | |
| Uniform Delay, d1 | 35.6 | 8.1 | | | 19.2 | 20.1 | 24.9 | 29.5 | 23.7 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 1.9 | 0.1 | | | 1.2 | 4.7 | 0.8 | 29.8 | 2.2 | | | |
| Delay (s) | 37.5 | 8.2 | | | 20.4 | 24.9 | 25.7 | 59.3 | 25.9 | | | |
| Level of Service | D | A | | | C | C | C | E | C | | | |
| Approach Delay (s) | | 16.0 | | | 22.0 | | | 41.6 | | | 0.0 | |
| Approach LOS | | B | | | C | | | D | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.2 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.80 | | |
| Actuated Cycle Length (s) | 84.7 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 70.7% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 91 | 298 | 107 | 19 | 704 | 223 | 48 | 222 | 8 | 159 | 266 | 220 |
| Future Volume (vph) | 91 | 298 | 107 | 19 | 704 | 223 | 48 | 222 | 8 | 159 | 266 | 220 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 0.95 | |
| Frt | 1.00 | 0.96 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 0.93 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3399 | | 1770 | 3412 | | 1770 | 1853 | | 1770 | 3299 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3399 | | 1770 | 3412 | | 1770 | 1853 | | 1770 | 3299 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 99 | 324 | 116 | 21 | 765 | 242 | 52 | 241 | 9 | 173 | 289 | 239 |
| RTOR Reduction (vph) | 0 | 36 | 0 | 0 | 36 | 0 | 0 | 1 | 0 | 0 | 145 | 0 |
| Lane Group Flow (vph) | 99 | 404 | 0 | 21 | 971 | 0 | 52 | 249 | 0 | 173 | 383 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | |
| Actuated Green, G (s) | 9.8 | 28.6 | | 7.6 | 26.4 | | 6.9 | 22.9 | | 12.9 | 28.9 | |
| Effective Green, g (s) | 9.8 | 28.6 | | 7.6 | 26.4 | | 6.9 | 22.9 | | 12.9 | 28.9 | |
| Actuated g/C Ratio | 0.11 | 0.32 | | 0.08 | 0.29 | | 0.08 | 0.25 | | 0.14 | 0.32 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 192 | 1080 | | 149 | 1000 | | 135 | 471 | | 253 | 1059 | |
| v/s Ratio Prot | c0.06 | 0.12 | | 0.01 | c0.28 | | 0.03 | c0.13 | | c0.10 | 0.12 | |
| v/s Ratio Perm | | | | | | | | | | | | |
| v/c Ratio | 0.52 | 0.37 | | 0.14 | 0.97 | | 0.39 | 0.53 | | 0.68 | 0.36 | |
| Uniform Delay, d1 | 37.9 | 23.8 | | 38.2 | 31.4 | | 39.5 | 28.9 | | 36.6 | 23.5 | |
| Progression Factor | 1.00 | 1.00 | | 0.68 | 0.51 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 2.3 | 1.0 | | 0.4 | 20.6 | | 1.8 | 4.2 | | 7.4 | 1.0 | |
| Delay (s) | 40.2 | 24.8 | | 26.5 | 36.7 | | 41.4 | 33.1 | | 44.0 | 24.4 | |
| Level of Service | D | C | | C | D | | D | C | | D | C | |
| Approach Delay (s) | | 27.6 | | | 36.5 | | | 34.5 | | | 29.3 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 32.4 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.72 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 67.6% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 71 | 372 | 11 | 147 | 697 | 65 | 11 | 68 | 116 | 90 | 107 | 216 |
| Future Volume (vph) | 71 | 372 | 11 | 147 | 697 | 65 | 11 | 68 | 116 | 90 | 107 | 216 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | | 1.00 | 0.85 | 1.00 | 0.90 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3524 | | 1770 | 3494 | | | 1850 | 1583 | 1770 | 1676 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.72 | 1.00 | 0.70 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3524 | | 1770 | 3494 | | | 1337 | 1583 | 1306 | 1676 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 77 | 404 | 12 | 160 | 758 | 71 | 12 | 74 | 126 | 98 | 116 | 235 |
| RTOR Reduction (vph) | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 100 | 0 | 92 | 0 |
| Lane Group Flow (vph) | 77 | 414 | 0 | 160 | 823 | 0 | 0 | 86 | 26 | 98 | 259 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 14.6 | 45.2 | | 12.4 | 43.0 | | | 18.9 | 18.9 | 18.9 | 18.9 | |
| Effective Green, g (s) | 14.6 | 45.2 | | 12.4 | 43.0 | | | 18.9 | 18.9 | 18.9 | 18.9 | |
| Actuated g/C Ratio | 0.16 | 0.50 | | 0.14 | 0.48 | | | 0.21 | 0.21 | 0.21 | 0.21 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 287 | 1769 | | 243 | 1669 | | | 280 | 332 | 274 | 351 | |
| v/s Ratio Prot | 0.04 | 0.12 | | c0.09 | c0.24 | | | | | | c0.15 | |
| v/s Ratio Perm | | | | | | | | 0.06 | 0.02 | 0.08 | | |
| v/c Ratio | 0.27 | 0.23 | | 0.66 | 0.49 | | | 0.31 | 0.08 | 0.36 | 0.74 | |
| Uniform Delay, d1 | 33.0 | 12.6 | | 36.8 | 16.1 | | | 30.0 | 28.6 | 30.4 | 33.2 | |
| Progression Factor | 1.06 | 0.26 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 0.4 | 0.3 | | 6.3 | 1.0 | | | 0.6 | 0.1 | 0.8 | 7.8 | |
| Delay (s) | 35.4 | 3.5 | | 43.1 | 17.1 | | | 30.6 | 28.7 | 31.2 | 41.1 | |
| Level of Service | D | A | | D | B | | | C | C | C | D | |
| Approach Delay (s) | | 8.5 | | | 21.3 | | | 29.5 | | | 38.9 | |
| Approach LOS | | A | | | C | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 22.9 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.56 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 55.6% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 2 | 323 | 389 | 237 | 550 | 0 | 0 | 0 | 0 | 229 | 2 | 366 |
| Future Volume (vph) | 2 | 323 | 389 | 237 | 550 | 0 | 0 | 0 | 0 | 229 | 2 | 366 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.92 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3249 | | 1610 | 3383 | | | | | 1681 | 1687 | 1583 |
| Flt Permitted | | 0.95 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3099 | | 1610 | 3181 | | | | | 1681 | 1687 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 2 | 351 | 423 | 258 | 598 | 0 | 0 | 0 | 0 | 249 | 2 | 398 |
| RTOR Reduction (vph) | 0 | 291 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 215 |
| Lane Group Flow (vph) | 0 | 485 | 0 | 232 | 624 | 0 | 0 | 0 | 0 | 124 | 127 | 183 |
| Turn Type | Perm | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | 4 | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 16.9 | | 14.6 | 36.0 | | | | | 23.9 | 23.9 | 23.9 |
| Effective Green, g (s) | | 16.9 | | 14.6 | 36.0 | | | | | 23.9 | 23.9 | 23.9 |
| Actuated g/C Ratio | | 0.25 | | 0.21 | 0.52 | | | | | 0.35 | 0.35 | 0.35 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 760 | | 341 | 1704 | | | | | 583 | 585 | 549 |
| v/s Ratio Prot | | | | c0.14 | 0.08 | | | | | 0.07 | 0.08 | |
| v/s Ratio Perm | | c0.16 | | | 0.11 | | | | | | | c0.12 |
| v/c Ratio | | 0.64 | | 0.68 | 0.37 | | | | | 0.21 | 0.22 | 0.33 |
| Uniform Delay, d1 | | 23.3 | | 25.0 | 9.7 | | | | | 15.9 | 15.9 | 16.6 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 1.8 | | 5.5 | 0.1 | | | | | 0.2 | 0.2 | 1.6 |
| Delay (s) | | 25.0 | | 30.5 | 9.8 | | | | | 16.0 | 16.1 | 18.3 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 25.0 | | | 15.4 | | | 0.0 | | | 17.4 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.3 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.52 | | |
| Actuated Cycle Length (s) | 68.9 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 54.3% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 405 | 254 | 174 | 452 | 363 | 167 | 266 | 1502 | 351 | 141 | 1095 | 363 |
| Future Volume (veh/h) | 405 | 254 | 174 | 452 | 363 | 167 | 266 | 1502 | 351 | 141 | 1095 | 363 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 440 | 276 | 189 | 491 | 395 | 182 | 289 | 1633 | 382 | 153 | 1190 | 395 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 551 | 567 | 254 | 621 | 639 | 286 | 350 | 2358 | 734 | 206 | 2146 | 668 |
| Arrive On Green | 0.16 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.10 | 0.46 | 0.46 | 0.06 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 440 | 276 | 189 | 491 | 395 | 182 | 289 | 1633 | 382 | 153 | 1190 | 395 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 16.3 | 9.4 | 15.1 | 18.1 | 13.7 | 14.1 | 10.9 | 33.6 | 22.6 | 5.8 | 23.4 | 25.5 |
| Cycle Q Clear(g_c), s | 16.3 | 9.4 | 15.1 | 18.1 | 13.7 | 14.1 | 10.9 | 33.6 | 22.6 | 5.8 | 23.4 | 25.5 |
| 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 | 551 | 567 | 254 | 621 | 639 | 286 | 350 | 2358 | 734 | 206 | 2146 | 668 |
| V/C Ratio(X) | 0.80 | 0.49 | 0.75 | 0.79 | 0.62 | 0.64 | 0.83 | 0.69 | 0.52 | 0.74 | 0.55 | 0.59 |
| Avail Cap(c_a), veh/h | 714 | 734 | 328 | 791 | 814 | 364 | 506 | 2358 | 734 | 324 | 2146 | 668 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.6 | 50.7 | 53.1 | 52.0 | 50.1 | 50.3 | 58.4 | 28.1 | 25.1 | 61.3 | 28.9 | 29.5 |
| Incr Delay (d2), s/veh | 4.9 | 0.6 | 6.6 | 4.2 | 1.0 | 2.4 | 7.4 | 1.7 | 2.6 | 5.2 | 1.0 | 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 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.1 | 4.7 | 7.0 | 9.0 | 6.8 | 6.3 | 5.6 | 16.1 | 10.4 | 2.9 | 11.1 | 11.8 |
| LnGrp Delay(d),s/veh | 58.5 | 51.4 | 59.7 | 56.2 | 51.1 | 52.7 | 65.8 | 29.8 | 27.8 | 66.5 | 30.0 | 33.3 |
| LnGrp LOS | E | D | E | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 905 | | | 1068 | | | 2304 | | | 1738 | |
| Approach Delay, s/veh | | 56.6 | | | 53.7 | | | 34.0 | | | 33.9 | |
| Approach LOS | | E | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 12.5 | 66.0 | | 25.7 | 18.0 | 60.5 | | 28.4 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 12.5 | 61.5 | | 27.5 | 19.5 | 54.5 | | 30.5 |
| Max Q Clear Time (g_c+I1), s | 7.8 | 35.6 | | 18.3 | 12.9 | 27.5 | | 20.1 |
| Green Ext Time (p_c), s | 0.2 | 16.1 | | 2.9 | 0.5 | 12.0 | | 3.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 40.9 |
| HCM 2010 LOS | D |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 459 | 1124 | 1479 | 372 | 0 | 1691 |
| Future Volume (veh/h) | 459 | 1124 | 1479 | 372 | 0 | 1691 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 499 | 1222 | 1608 | 404 | 0 | 1838 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1609 | 1303 | 1913 | 475 | 0 | 2393 |
| Arrive On Green | 0.47 | 0.47 | 0.47 | 0.47 | 0.00 | 0.47 |
| Sat Flow, veh/h | 3442 | 2787 | 4233 | 1010 | 0 | 5421 |
| Grp Volume(v), veh/h | 499 | 1222 | 1338 | 674 | 0 | 1838 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1685 | 0 | 1695 |
| Q Serve(g_s), s | 13.1 | 60.5 | 50.2 | 51.4 | 0.0 | 43.6 |
| Cycle Q Clear(g_c), s | 13.1 | 60.5 | 50.2 | 51.4 | 0.0 | 43.6 |
| Prop In Lane | 1.00 | 1.00 | | 0.60 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1609 | 1303 | 1595 | 793 | 0 | 2393 |
| V/C Ratio(X) | 0.31 | 0.94 | 0.84 | 0.85 | 0.00 | 0.77 |
| Avail Cap(c_a), veh/h | 1714 | 1388 | 1595 | 793 | 0 | 2393 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.1 | 36.7 | 33.7 | 34.0 | 0.0 | 31.9 |
| Incr Delay (d2), s/veh | 0.1 | 11.9 | 5.5 | 11.1 | 0.0 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.3 | 25.4 | 24.6 | 26.2 | 0.0 | 21.0 |
| LnGrp Delay(d),s/veh | 24.2 | 48.6 | 39.2 | 45.1 | 0.0 | 34.4 |
| LnGrp LOS | C | D | D | D | | C |
| Approach Vol, veh/h | 1721 | | 2012 | | | 1838 |
| Approach Delay, s/veh | 41.6 | | 41.1 | | | 34.4 |
| Approach LOS | D | | D | | | C |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 73.0 | | | | 73.0 | | 72.6 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 68.5 | | | | 68.5 | | 72.5 |
| Max Q Clear Time (g_c+I1), s | | 53.4 | | | | 45.6 | | 62.5 |
| Green Ext Time (p_c), s | | 11.7 | | | | 15.1 | | 5.5 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 39.0 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 206 | 535 | 105 | 34 | 962 | 131 | 91 | 71 | 20 | 130 | 114 | 357 |
| Future Volume (veh/h) | 206 | 535 | 105 | 34 | 962 | 131 | 91 | 71 | 20 | 130 | 114 | 357 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 224 | 582 | 114 | 37 | 1046 | 142 | 99 | 77 | 22 | 141 | 124 | 388 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 262 | 1469 | 287 | 59 | 1200 | 163 | 211 | 449 | 128 | 287 | 225 | 510 |
| Arrive On Green | 0.15 | 0.50 | 0.50 | 0.03 | 0.38 | 0.38 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1774 | 2954 | 577 | 1774 | 3133 | 425 | 885 | 1394 | 398 | 703 | 698 | 1583 |
| Grp Volume(v), veh/h | 224 | 348 | 348 | 37 | 590 | 598 | 99 | 0 | 99 | 265 | 0 | 388 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1761 | 1774 | 1770 | 1788 | 885 | 0 | 1792 | 1401 | 0 | 1583 |
| Q Serve(g_s), s | 11.3 | 11.3 | 11.3 | 1.9 | 28.3 | 28.4 | 9.8 | 0.0 | 3.6 | 12.1 | 0.0 | 20.2 |
| Cycle Q Clear(g_c), s | 11.3 | 11.3 | 11.3 | 1.9 | 28.3 | 28.4 | 25.6 | 0.0 | 3.6 | 15.8 | 0.0 | 20.2 |
| Prop In Lane | 1.00 | | 0.33 | 1.00 | | 0.24 | 1.00 | | 0.22 | 0.53 | | 1.00 |
| Lane Grp Cap(c), veh/h | 262 | 880 | 876 | 59 | 678 | 685 | 211 | 0 | 577 | 511 | 0 | 510 |
| V/C Ratio(X) | 0.86 | 0.40 | 0.40 | 0.63 | 0.87 | 0.87 | 0.47 | 0.00 | 0.17 | 0.52 | 0.00 | 0.76 |
| Avail Cap(c_a), veh/h | 358 | 979 | 975 | 122 | 744 | 751 | 211 | 0 | 577 | 511 | 0 | 510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 38.1 | 14.4 | 14.4 | 43.7 | 26.2 | 26.2 | 37.3 | 0.0 | 22.3 | 27.1 | 0.0 | 27.9 |
| Incr Delay (d2), s/veh | 13.8 | 0.3 | 0.3 | 10.4 | 10.3 | 10.4 | 7.3 | 0.0 | 0.6 | 3.7 | 0.0 | 10.3 |
| 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 | 6.5 | 5.6 | 5.6 | 1.1 | 15.7 | 15.9 | 2.8 | 0.0 | 1.9 | 6.2 | 0.0 | 10.2 |
| LnGrp Delay(d),s/veh | 51.9 | 14.7 | 14.7 | 54.1 | 36.5 | 36.6 | 44.6 | 0.0 | 22.9 | 30.8 | 0.0 | 38.1 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | D |
| Approach Vol, veh/h | | 920 | | | 1225 | | | 198 | | | 653 | |
| Approach Delay, s/veh | | 23.8 | | | 37.1 | | | 33.8 | | | 35.2 | |
| Approach LOS | | C | | | D | | | C | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 34.0 | 7.5 | 50.1 | | 34.0 | 18.0 | 39.6 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 29.5 | 6.3 | 50.7 | | 29.5 | 18.5 | 38.5 |
| Max Q Clear Time (g_c+I1), s | | 27.6 | 3.9 | 13.3 | | 22.2 | 13.3 | 30.4 |
| Green Ext Time (p_c), s | | 0.2 | 0.0 | 5.0 | | 1.9 | 0.3 | 4.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 32.3 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 19 | 598 | 36 | 30 | 874 | 27 | 68 | 13 | 53 | 29 | 18 | 91 |
| Future Volume (veh/h) | 19 | 598 | 36 | 30 | 874 | 27 | 68 | 13 | 53 | 29 | 18 | 91 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 21 | 650 | 39 | 33 | 950 | 29 | 74 | 14 | 58 | 32 | 20 | 99 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 40 | 1085 | 65 | 56 | 1152 | 35 | 207 | 39 | 162 | 367 | 386 | 328 |
| Arrive On Green | 0.02 | 0.32 | 0.32 | 0.03 | 0.33 | 0.33 | 0.24 | 0.24 | 0.24 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3393 | 203 | 1774 | 3506 | 107 | 862 | 163 | 676 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 21 | 339 | 350 | 33 | 479 | 500 | 146 | 0 | 0 | 32 | 20 | 99 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1827 | 1774 | 1770 | 1844 | 1700 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 1.0 | 14.4 | 14.4 | 1.6 | 22.3 | 22.3 | 6.4 | 0.0 | 0.0 | 1.3 | 0.8 | 4.7 |
| Cycle Q Clear(g_c), s | 1.0 | 14.4 | 14.4 | 1.6 | 22.3 | 22.3 | 6.4 | 0.0 | 0.0 | 1.3 | 0.8 | 4.7 |
| Prop In Lane | 1.00 | | 0.11 | 1.00 | | 0.06 | 0.51 | | 0.40 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 40 | 566 | 584 | 56 | 581 | 606 | 409 | 0 | 0 | 367 | 386 | 328 |
| V/C Ratio(X) | 0.52 | 0.60 | 0.60 | 0.59 | 0.82 | 0.82 | 0.36 | 0.00 | 0.00 | 0.09 | 0.05 | 0.30 |
| Avail Cap(c_a), veh/h | 109 | 703 | 726 | 129 | 723 | 753 | 409 | 0 | 0 | 367 | 386 | 328 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 43.2 | 25.6 | 25.6 | 42.7 | 27.6 | 27.6 | 28.2 | 0.0 | 0.0 | 28.6 | 28.4 | 30.0 |
| Incr Delay (d2), s/veh | 10.0 | 1.0 | 1.0 | 9.8 | 6.4 | 6.1 | 2.4 | 0.0 | 0.0 | 0.5 | 0.3 | 2.4 |
| 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 | 0.6 | 7.1 | 7.4 | 1.0 | 12.0 | 12.4 | 3.3 | 0.0 | 0.0 | 0.7 | 0.4 | 2.3 |
| LnGrp Delay(d),s/veh | 53.2 | 26.6 | 26.6 | 52.5 | 34.0 | 33.8 | 30.6 | 0.0 | 0.0 | 29.1 | 28.7 | 32.3 |
| LnGrp LOS | D | C | C | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 710 | | | 1012 | | | 146 | | | 151 | |
| Approach Delay, s/veh | | 27.4 | | | 34.5 | | | 30.6 | | | 31.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 26.0 | 7.3 | 33.1 | | 23.0 | 6.5 | 33.9 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 21.5 | 6.5 | 35.5 | | 18.5 | 5.5 | 36.5 |
| Max Q Clear Time (g_c+I1), s | | 8.4 | 3.6 | 16.4 | | 6.7 | 3.0 | 24.3 |
| Green Ext Time (p_c), s | | 0.6 | 0.0 | 4.2 | | 0.3 | 0.0 | 5.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 31.5 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 179 | 270 | 232 | 288 | 445 | 196 | 324 | 1376 | 107 | 316 | 1197 | 187 |
| Future Volume (veh/h) | 179 | 270 | 232 | 288 | 445 | 196 | 324 | 1376 | 107 | 316 | 1197 | 187 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 195 | 293 | 252 | 313 | 484 | 213 | 352 | 1496 | 116 | 343 | 1301 | 203 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 219 | 553 | 247 | 692 | 560 | 245 | 408 | 2024 | 630 | 399 | 2012 | 626 |
| Arrive On Green | 0.12 | 0.16 | 0.16 | 0.20 | 0.23 | 0.23 | 0.12 | 0.40 | 0.40 | 0.12 | 0.40 | 0.40 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2398 | 1049 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 195 | 293 | 252 | 313 | 356 | 341 | 352 | 1496 | 116 | 343 | 1301 | 203 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1678 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 15.2 | 10.7 | 17.1 | 11.2 | 27.1 | 27.3 | 14.1 | 35.1 | 3.7 | 13.7 | 29.1 | 8.6 |
| Cycle Q Clear(g_c), s | 15.2 | 10.7 | 17.1 | 11.2 | 27.1 | 27.3 | 14.1 | 35.1 | 3.7 | 13.7 | 29.1 | 8.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.63 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 219 | 553 | 247 | 692 | 414 | 392 | 408 | 2024 | 630 | 399 | 2012 | 626 |
| V/C Ratio(X) | 0.89 | 0.53 | 1.02 | 0.45 | 0.86 | 0.87 | 0.86 | 0.74 | 0.18 | 0.86 | 0.65 | 0.32 |
| Avail Cap(c_a), veh/h | 260 | 1024 | 458 | 692 | 512 | 485 | 504 | 2024 | 630 | 504 | 2012 | 626 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 0.49 | 0.49 | 0.49 | 1.00 | 1.00 | 1.00 | 0.72 | 0.72 | 0.72 |
| Uniform Delay (d), s/veh | 60.4 | 54.3 | 36.2 | 49.1 | 51.5 | 51.6 | 60.6 | 35.9 | 8.6 | 60.8 | 34.4 | 13.9 |
| Incr Delay (d2), s/veh | 21.8 | 0.6 | 32.5 | 0.2 | 6.3 | 7.0 | 12.2 | 2.5 | 0.6 | 8.7 | 1.2 | 1.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.8 | 5.3 | 10.3 | 5.3 | 14.0 | 13.4 | 7.4 | 16.9 | 2.8 | 7.0 | 13.8 | 4.9 |
| LnGrp Delay(d),s/veh | 82.2 | 55.0 | 68.8 | 49.4 | 57.7 | 58.6 | 72.8 | 38.4 | 9.2 | 69.4 | 35.5 | 14.9 |
| LnGrp LOS | F | D | F | D | E | E | E | D | A | E | D | B |
| Approach Vol, veh/h | | 740 | | | 1010 | | | 1964 | | | 1847 | |
| Approach Delay, s/veh | | 66.9 | | | 55.4 | | | 42.8 | | | 39.6 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 21.8 | 37.2 | 20.7 | 60.2 | 32.7 | 26.4 | 21.1 | 59.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 |
| Max Q Clear Time (g_c+I1), s | 17.2 | 29.3 | 15.7 | 37.1 | 13.2 | 19.1 | 16.1 | 31.1 |
| Green Ext Time (p_c), s | 0.2 | 3.4 | 0.5 | 2.7 | 0.7 | 2.7 | 0.5 | 6.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 47.2 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 206 | 394 | 0 | 0 | 391 | 206 | 322 | 2 | 0 | 87 | 0 | 82 |
| Future Volume (veh/h) | 206 | 394 | 0 | 0 | 391 | 206 | 322 | 2 | 0 | 87 | 0 | 82 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 224 | 428 | 0 | 0 | 425 | 224 | 350 | 2 | 0 | 95 | 0 | 89 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 332 | 712 | 0 | 0 | 711 | 332 | 0 | 598 | 0 | 122 | 0 | 0 |
| Arrive On Green | 0.10 | 0.38 | 0.00 | 0.00 | 0.21 | 0.21 | 0.00 | 0.32 | 0.00 | 0.07 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 95 | |
| Grp Volume(v), veh/h | 224 | 428 | 0 | 0 | 425 | 224 | 0 | 2 | 0 | 95 | 37.2 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | D | |
| Q Serve(g_s), s | 3.7 | 10.9 | 0.0 | 0.0 | 6.7 | 7.7 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Cycle Q Clear(g_c), s | 3.7 | 10.9 | 0.0 | 0.0 | 6.7 | 7.7 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 332 | 712 | 0 | 0 | 711 | 332 | 0 | 598 | 0 | 122 | | |
| V/C Ratio(X) | 0.67 | 0.60 | 0.00 | 0.00 | 0.60 | 0.67 | 0.00 | 0.00 | 0.00 | 0.78 | | |
| Avail Cap(c_a), veh/h | 436 | 944 | 0 | 0 | 1031 | 481 | 0 | 598 | 0 | 225 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 25.9 | 14.7 | 0.0 | 0.0 | 21.1 | 21.5 | 0.0 | 13.7 | 0.0 | 27.1 | | |
| Incr Delay (d2), s/veh | 2.6 | 0.8 | 0.0 | 0.0 | 0.8 | 2.4 | 0.0 | 0.0 | 0.0 | 10.1 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 1.9 | 5.7 | 0.0 | 0.0 | 3.2 | 3.6 | 0.0 | 0.0 | 0.0 | 1.9 | | |
| LnGrp Delay(d),s/veh | 28.5 | 15.5 | 0.0 | 0.0 | 21.9 | 23.9 | 0.0 | 13.7 | 0.0 | 37.2 | | |
| LnGrp LOS | C | B | | | C | C | | B | | D | | |
| Approach Vol, veh/h | | 652 | | | 649 | | | 2 | | | | |
| Approach Delay, s/veh | | 20.0 | | | 22.6 | | | 13.7 | | | | |
| Approach LOS | | B | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 23.5 | | 27.1 | 0.0 | | 10.2 | 16.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 19.0 | | 30.0 | 5.0 | | 7.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | 5.1 | 2.0 | | 12.9 | 0.0 | | 5.7 | 9.7 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 2.5 | 0.0 | | 0.1 | 2.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.4 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 16 | 28 | 7 | 12 | 79 | 44 | 2 | 73 | 1 | 9 | 59 | 12 |
| Future Vol, veh/h | 16 | 28 | 7 | 12 | 79 | 44 | 2 | 73 | 1 | 9 | 59 | 12 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 30 | 8 | 13 | 86 | 48 | 2 | 79 | 1 | 10 | 64 | 13 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.8 | 8.1 | 8 | 8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 3% | 31% | 9% | 11% |
| Vol Thru, % | 96% | 55% | 59% | 74% |
| Vol Right, % | 1% | 14% | 33% | 15% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 76 | 51 | 135 | 80 |
| LT Vol | 2 | 16 | 12 | 9 |
| Through Vol | 73 | 28 | 79 | 59 |
| RT Vol | 1 | 7 | 44 | 12 |
| Lane Flow Rate | 83 | 55 | 147 | 87 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.103 | 0.069 | 0.172 | 0.107 |
| Departure Headway (Hd) | 4.48 | 4.461 | 4.209 | 4.412 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 802 | 804 | 854 | 814 |
| Service Time | 2.497 | 2.479 | 2.224 | 2.428 |
| HCM Lane V/C Ratio | 0.103 | 0.068 | 0.172 | 0.107 |
| HCM Control Delay | 8 | 7.8 | 8.1 | 8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.2 | 0.6 | 0.4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 1 | 52 | 12 | 39 | 117 | 14 | 11 | 3 | 27 | 5 | 3 | 3 |
| Future Vol, veh/h | 1 | 52 | 12 | 39 | 117 | 14 | 11 | 3 | 27 | 5 | 3 | 3 |
| 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 | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 57 | 13 | 42 | 127 | 15 | 12 | 3 | 29 | 5 | 3 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 142 | 0 | 0 | 70 | 0 | 0 | 288 | 292 | 64 | 301 | 291 | 135 |
| Stage 1 | - | - | - | - | - | - | 66 | 66 | - | 219 | 219 | - |
| Stage 2 | - | - | - | - | - | - | 222 | 226 | - | 82 | 72 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1441 | - | - | 1531 | - | - | 664 | 619 | 1000 | 651 | 619 | 914 |
| Stage 1 | - | - | - | - | - | - | 945 | 840 | - | 783 | 722 | - |
| Stage 2 | - | - | - | - | - | - | 780 | 717 | - | 926 | 835 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1441 | - | - | 1531 | - | - | 643 | 600 | 1000 | 615 | 600 | 914 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 643 | 600 | - | 615 | 600 | - |
| Stage 1 | - | - | - | - | - | - | 944 | 839 | - | 782 | 700 | - |
| Stage 2 | - | - | - | - | - | - | 750 | 695 | - | 894 | 834 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 1.7 | 9.6 | 10.5 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 835 | 1441 | - | - | 1531 | - | - | 670 |
| HCM Lane V/C Ratio | 0.053 | 0.001 | - | - | 0.028 | - | - | 0.018 |
| HCM Control Delay (s) | 9.6 | 7.5 | 0 | - | 7.4 | 0 | - | 10.5 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0.1 | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 99 | 6 | 3 | 155 | 3 | 0 | 0 | 3 | 0 | 0 | 0 |
| Future Vol, veh/h | 3 | 99 | 6 | 3 | 155 | 3 | 0 | 0 | 3 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 108 | 7 | 3 | 168 | 3 | 0 | 0 | 3 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 171 | 0 | 0 | 115 | 0 | 0 | 294 | 295 | 112 | 295 | 297 | 170 |
| Stage 1 | - | - | - | - | - | - | 118 | 118 | - | 176 | 176 | - |
| Stage 2 | - | - | - | - | - | - | 176 | 177 | - | 119 | 121 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1406 | - | - | 1474 | - | - | 658 | 616 | 941 | 657 | 615 | 874 |
| Stage 1 | - | - | - | - | - | - | 887 | 798 | - | 826 | 753 | - |
| Stage 2 | - | - | - | - | - | - | 826 | 753 | - | 885 | 796 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1406 | - | - | 1474 | - | - | 656 | 614 | 941 | 652 | 613 | 874 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 656 | 614 | - | 652 | 613 | - |
| Stage 1 | - | - | - | - | - | - | 885 | 796 | - | 824 | 751 | - |
| Stage 2 | - | - | - | - | - | - | 824 | 751 | - | 880 | 794 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.1 | 8.8 | 0 |
| HCM LOS | | | A | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 941 | 1406 | - | - | 1474 | - | - | - |
| HCM Lane V/C Ratio | 0.003 | 0.002 | - | - | 0.002 | - | - | - |
| HCM Control Delay (s) | 8.8 | 7.6 | 0 | - | 7.4 | 0 | - | 0 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 14.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 17 | 67 | 85 | 1691 | 1651 | 86 |
| Future Vol, veh/h | 17 | 67 | 85 | 1691 | 1651 | 86 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 250 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 73 | 92 | 1838 | 1795 | 93 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 2761 | 944 | 1888 | 0 | - | 0 |
| Stage 1 | 1842 | - | - | - | - | - |
| Stage 2 | 919 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | 5.34 | - | - | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | 3.12 | - | - | - |
| Pot Cap-1 Maneuver | 36 | 226 | 142 | - | - | - |
| Stage 1 | 72 | - | - | - | - | - |
| Stage 2 | 316 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | ~ 13 | 226 | 142 | - | - | - |
| Mov Cap-2 Maneuver | ~ 13 | - | - | - | - | - |
| Stage 1 | 25 | - | - | - | - | - |
| Stage 2 | 316 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | $ 533.5 | 3.3 | 0 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 142 | - | 52 | - | - |
| HCM Lane V/C Ratio | 0.651 | - | 1.756 | - | - |
| HCM Control Delay (s) | 68.4 | - | $ 533.5 | - | - |
| HCM Lane LOS | F | - | F | - | - |
| HCM 95th %tile Q(veh) | 3.6 | - | 8.8 | - | - |

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 9 | 18 | 30 | 7 | 5 | 4 | 4 |
| Future Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 9 | 18 | 30 | 7 | 5 | 4 | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 25 | 4 | 16 | 26 | 10 | 20 | 33 | 8 | 5 | 4 | 4 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.2 | 7.3 | 7.4 | 7.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 33% | 10% | 31% | 38% |
| Vol Thru, % | 55% | 77% | 50% | 31% |
| Vol Right, % | 13% | 13% | 19% | 31% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 55 | 30 | 48 | 13 |
| LT Vol | 18 | 3 | 15 | 5 |
| Through Vol | 30 | 23 | 24 | 4 |
| RT Vol | 7 | 4 | 9 | 4 |
| Lane Flow Rate | 60 | 33 | 52 | 14 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.068 | 0.037 | 0.059 | 0.016 |
| Departure Headway (Hd) | 4.08 | 4.042 | 4.038 | 4.018 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 874 | 881 | 883 | 884 |
| Service Time | 2.124 | 2.089 | 2.08 | 2.072 |
| HCM Lane V/C Ratio | 0.069 | 0.037 | 0.059 | 0.016 |
| HCM Control Delay | 7.4 | 7.2 | 7.3 | 7.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.1 | 0.2 | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 102 | 108 | 1631 | 36 | 170 | 1522 |
| Future Volume (veh/h) | 102 | 108 | 1631 | 36 | 170 | 1522 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 111 | 117 | 1773 | 39 | 185 | 1654 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 127 | 133 | 3846 | 85 | 234 | 3820 |
| Arrive On Green | 0.16 | 0.16 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 810 | 854 | 5288 | 113 | 258 | 5253 |
| Grp Volume(v), veh/h | 229 | 0 | 1174 | 638 | 185 | 1654 |
| Grp Sat Flow(s),veh/h/ln | 1672 | 0 | 1695 | 1843 | 258 | 1695 |
| Q Serve(g_s), s | 13.0 | 0.0 | 12.8 | 12.8 | 60.2 | 11.7 |
| Cycle Q Clear(g_c), s | 13.0 | 0.0 | 12.8 | 12.8 | 73.0 | 11.7 |
| Prop In Lane | 0.48 | 0.51 | | 0.06 | 1.00 | |
| Lane Grp Cap(c), veh/h | 261 | 0 | 2546 | 1384 | 234 | 3820 |
| V/C Ratio(X) | 0.88 | 0.00 | 0.46 | 0.46 | 0.79 | 0.43 |
| Avail Cap(c_a), veh/h | 310 | 0 | 2546 | 1384 | 234 | 3820 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 4.6 | 4.6 | 22.6 | 4.5 |
| Incr Delay (d2), s/veh | 21.0 | 0.0 | 0.6 | 1.1 | 23.4 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.5 | 0.0 | 6.1 | 6.8 | 6.5 | 5.5 |
| LnGrp Delay(d),s/veh | 61.1 | 0.0 | 5.2 | 5.7 | 46.1 | 4.8 |
| LnGrp LOS | E | | A | A | D | A |
| Approach Vol, veh/h | 229 | | 1812 | | | 1839 |
| Approach Delay, s/veh | 61.1 | | 5.4 | | | 9.0 |
| Approach LOS | E | | A | | | A |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 77.5 | | | | 77.5 | | 19.7 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 73.0 | | | | 73.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 14.8 | | | | 75.0 | | 15.0 |
| Green Ext Time (p_c), s | | 22.7 | | | | 0.0 | | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 10.4 |
| HCM 2010 LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1411 | 40 | 111 | 1382 | 161 |
| Future Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1411 | 40 | 111 | 1382 | 161 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 108 | 53 | 114 | 117 | 54 | 65 | 153 | 1534 | 43 | 121 | 1502 | 175 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 146 | 72 | 191 | 154 | 71 | 197 | 189 | 2267 | 64 | 153 | 1965 | 229 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 | 0.45 | 0.45 | 0.09 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1209 | 593 | 1583 | 1232 | 569 | 1583 | 1774 | 5085 | 143 | 1774 | 4620 | 538 |
| Grp Volume(v), veh/h | 161 | 0 | 114 | 171 | 0 | 65 | 153 | 1023 | 554 | 121 | 1102 | 575 |
| Grp Sat Flow(s),veh/h/ln | 1802 | 0 | 1583 | 1801 | 0 | 1583 | 1774 | 1695 | 1838 | 1774 | 1695 | 1768 |
| Q Serve(g_s), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 19.4 | 19.4 | 5.4 | 22.4 | 22.4 |
| Cycle Q Clear(g_c), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 19.4 | 19.4 | 5.4 | 22.4 | 22.4 |
| Prop In Lane | 0.67 | | 1.00 | 0.68 | | 1.00 | 1.00 | | 0.08 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 218 | 0 | 191 | 225 | 0 | 197 | 189 | 1512 | 819 | 153 | 1442 | 752 |
| V/C Ratio(X) | 0.74 | 0.00 | 0.60 | 0.76 | 0.00 | 0.33 | 0.81 | 0.68 | 0.68 | 0.79 | 0.76 | 0.76 |
| Avail Cap(c_a), veh/h | 403 | 0 | 354 | 403 | 0 | 354 | 256 | 1512 | 819 | 213 | 1442 | 752 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 0.0 | 33.7 | 34.3 | 0.0 | 32.3 | 35.4 | 17.8 | 17.8 | 36.3 | 19.8 | 19.8 |
| Incr Delay (d2), s/veh | 4.8 | 0.0 | 2.9 | 5.3 | 0.0 | 1.0 | 12.8 | 2.4 | 4.5 | 12.7 | 3.9 | 7.3 |
| 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 | 3.8 | 0.0 | 2.6 | 4.0 | 0.0 | 1.4 | 4.0 | 9.5 | 10.7 | 3.2 | 11.2 | 12.4 |
| LnGrp Delay(d),s/veh | 39.2 | 0.0 | 36.7 | 39.5 | 0.0 | 33.3 | 48.2 | 20.2 | 22.3 | 49.0 | 23.7 | 27.1 |
| LnGrp LOS | D | | D | D | | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 275 | | | 236 | | | 1730 | | | 1798 | |
| Approach Delay, s/veh | | 38.1 | | | 37.8 | | | 23.4 | | | 26.5 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 11.5 | 40.6 | | 14.3 | 13.1 | 38.9 | | 14.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 9.7 | 36.1 | | 18.1 | 11.7 | 34.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 7.4 | 21.4 | | 9.0 | 8.8 | 24.4 | | 9.4 |
| Green Ext Time (p_c), s | 0.1 | 9.2 | | 0.8 | 0.1 | 7.1 | | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 26.6 |
| HCM 2010 LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 179 | 157 | 0 | 1094 | 1367 | 907 |
| Future Volume (vph) | 179 | 157 | 0 | 1094 | 1367 | 907 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.97 | 0.85 | | 1.00 | 0.94 | |
| Flt Protected | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3362 | 1441 | | 5085 | 4781 | |
| Flt Permitted | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3362 | 1441 | | 5085 | 4781 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 195 | 171 | 0 | 1189 | 1486 | 986 |
| RTOR Reduction (vph) | 25 | 66 | 0 | 0 | 74 | 0 |
| Lane Group Flow (vph) | 226 | 49 | 0 | 1189 | 2398 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 12.7 | 12.7 | | 88.9 | 88.9 | |
| Effective Green, g (s) | 12.7 | 12.7 | | 88.9 | 88.9 | |
| Actuated g/C Ratio | 0.11 | 0.11 | | 0.80 | 0.80 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 386 | 165 | | 4087 | 3842 | |
| v/s Ratio Prot | c0.07 | | | 0.23 | c0.50 | |
| v/s Ratio Perm | | 0.03 | | | | |
| v/c Ratio | 0.59 | 0.30 | | 0.29 | 0.62 | |
| Uniform Delay, d1 | 46.5 | 44.9 | | 2.8 | 4.3 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 2.3 | 1.0 | | 0.2 | 0.8 | |
| Delay (s) | 48.7 | 45.9 | | 3.0 | 5.0 | |
| Level of Service | D | D | | A | A | |
| Approach Delay (s) | 47.8 | | | 3.0 | 5.0 | |
| Approach LOS | D | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 8.3 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.62 | | |
| Actuated Cycle Length (s) | 110.6 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 61.0% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 956 | 290 | 150 | 425 | 0 | 0 | 0 | 0 | 389 | 200 | 162 |
| Future Volume (vph) | 0 | 956 | 290 | 150 | 425 | 0 | 0 | 0 | 0 | 389 | 200 | 162 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.99 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3111 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3111 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 1039 | 315 | 163 | 462 | 0 | 0 | 0 | 0 | 423 | 217 | 176 |
| RTOR Reduction (vph) | 0 | 0 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 98 |
| Lane Group Flow (vph) | 0 | 1039 | 110 | 163 | 462 | 0 | 0 | 0 | 0 | 216 | 439 | 60 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 28.3 | 28.3 | 8.5 | 41.3 | | | | | 30.8 | 30.8 | 30.8 |
| Effective Green, g (s) | | 28.3 | 28.3 | 8.5 | 41.3 | | | | | 30.8 | 30.8 | 30.8 |
| Actuated g/C Ratio | | 0.35 | 0.35 | 0.10 | 0.51 | | | | | 0.38 | 0.38 | 0.38 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1774 | 552 | 359 | 1802 | | | | | 611 | 1181 | 547 |
| v/s Ratio Prot | | c0.20 | | c0.05 | 0.13 | | | | | 0.13 | c0.14 | |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.04 |
| v/c Ratio | | 0.59 | 0.20 | 0.45 | 0.26 | | | | | 0.35 | 0.37 | 0.11 |
| Uniform Delay, d1 | | 21.6 | 18.5 | 34.1 | 11.2 | | | | | 18.0 | 18.2 | 16.3 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.2 | 0.9 | 0.1 | | | | | 0.4 | 0.2 | 0.4 |
| Delay (s) | | 22.1 | 18.6 | 35.0 | 11.3 | | | | | 18.4 | 18.4 | 16.7 |
| Level of Service | | C | B | D | B | | | | | B | B | B |
| Approach Delay (s) | | 21.3 | | | 17.5 | | | 0.0 | | | 18.0 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.5 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.47 | | |
| Actuated Cycle Length (s) | 81.1 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 57.0% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 329 | 973 | 0 | 0 | 450 | 265 | 119 | 198 | 548 | 0 | 0 | 0 |
| Future Volume (vph) | 329 | 973 | 0 | 0 | 450 | 265 | 119 | 198 | 548 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.93 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1573 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1573 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 358 | 1058 | 0 | 0 | 489 | 288 | 129 | 215 | 596 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 233 | 0 | 17 | 36 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 358 | 1058 | 0 | 0 | 489 | 55 | 116 | 414 | 357 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 13.2 | 34.5 | | | 16.8 | 16.8 | 43.7 | 43.7 | 43.7 | | | |
| Effective Green, g (s) | 13.2 | 34.5 | | | 16.8 | 16.8 | 43.7 | 43.7 | 43.7 | | | |
| Actuated g/C Ratio | 0.15 | 0.40 | | | 0.19 | 0.19 | 0.50 | 0.50 | 0.50 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 519 | 1400 | | | 681 | 304 | 842 | 788 | 753 | | | |
| v/s Ratio Prot | 0.10 | c0.30 | | | 0.14 | | 0.07 | c0.26 | | | | |
| v/s Ratio Perm | | | | | | 0.04 | | | 0.24 | | | |
| v/c Ratio | 0.69 | 0.76 | | | 0.72 | 0.18 | 0.14 | 0.52 | 0.47 | | | |
| Uniform Delay, d1 | 35.1 | 22.7 | | | 33.0 | 29.5 | 11.7 | 14.7 | 14.2 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 3.8 | 2.4 | | | 3.6 | 0.3 | 0.1 | 0.6 | 2.1 | | | |
| Delay (s) | 38.9 | 25.1 | | | 36.6 | 29.7 | 11.7 | 15.4 | 16.4 | | | |
| Level of Service | D | C | | | D | C | B | B | B | | | |
| Approach Delay (s) | | 28.6 | | | 34.1 | | | 15.3 | | | 0.0 | |
| Approach LOS | | C | | | C | | | B | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.0 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.66 | | |
| Actuated Cycle Length (s) | 87.2 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 57.0% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 94 | 478 | 50 | 11 | 320 | 100 | 38 | 194 | 10 | 103 | 116 | 136 |
| Future Volume (vph) | 94 | 478 | 50 | 11 | 320 | 100 | 38 | 194 | 10 | 103 | 116 | 136 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 0.95 | |
| Frt | 1.00 | 0.99 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 0.92 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3489 | | 1770 | 3413 | | 1770 | 1849 | | 1770 | 3252 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3489 | | 1770 | 3413 | | 1770 | 1849 | | 1770 | 3252 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 102 | 520 | 54 | 12 | 348 | 109 | 41 | 211 | 11 | 112 | 126 | 148 |
| RTOR Reduction (vph) | 0 | 8 | 0 | 0 | 29 | 0 | 0 | 2 | 0 | 0 | 125 | 0 |
| Lane Group Flow (vph) | 102 | 566 | 0 | 12 | 428 | 0 | 41 | 220 | 0 | 112 | 149 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | |
| Actuated Green, G (s) | 12.5 | 35.7 | | 10.5 | 33.7 | | 11.9 | 15.8 | | 10.0 | 13.9 | |
| Effective Green, g (s) | 12.5 | 35.7 | | 10.5 | 33.7 | | 11.9 | 15.8 | | 10.0 | 13.9 | |
| Actuated g/C Ratio | 0.14 | 0.40 | | 0.12 | 0.37 | | 0.13 | 0.18 | | 0.11 | 0.15 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 245 | 1383 | | 206 | 1277 | | 234 | 324 | | 196 | 502 | |
| v/s Ratio Prot | c0.06 | c0.16 | | 0.01 | 0.13 | | 0.02 | c0.12 | | c0.06 | 0.05 | |
| v/s Ratio Perm | | | | | | | | | | | | |
| v/c Ratio | 0.42 | 0.41 | | 0.06 | 0.34 | | 0.18 | 0.68 | | 0.57 | 0.30 | |
| Uniform Delay, d1 | 35.4 | 19.6 | | 35.4 | 20.1 | | 34.7 | 34.7 | | 38.0 | 33.7 | |
| Progression Factor | 1.00 | 1.00 | | 0.77 | 0.62 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 5.1 | 0.9 | | 0.5 | 0.7 | | 0.4 | 5.5 | | 4.0 | 0.3 | |
| Delay (s) | 40.6 | 20.5 | | 27.7 | 13.1 | | 35.0 | 40.2 | | 41.9 | 34.0 | |
| Level of Service | D | C | | C | B | | D | D | | D | C | |
| Approach Delay (s) | | 23.5 | | | 13.5 | | | 39.4 | | | 36.3 | |
| Approach LOS | | C | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.0 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.50 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 50.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 145 | 437 | 13 | 66 | 334 | 115 | 2 | 116 | 156 | 62 | 33 | 101 |
| Future Volume (vph) | 145 | 437 | 13 | 66 | 334 | 115 | 2 | 116 | 156 | 62 | 33 | 101 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.96 | | | 1.00 | 0.85 | 1.00 | 0.89 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3524 | | 1770 | 3403 | | | 1861 | 1583 | 1770 | 1652 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.59 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3524 | | 1770 | 3403 | | | 1854 | 1583 | 1097 | 1652 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 158 | 475 | 14 | 72 | 363 | 125 | 2 | 126 | 170 | 67 | 36 | 110 |
| RTOR Reduction (vph) | 0 | 1 | 0 | 0 | 26 | 0 | 0 | 0 | 148 | 0 | 96 | 0 |
| Lane Group Flow (vph) | 158 | 488 | 0 | 72 | 462 | 0 | 0 | 128 | 22 | 67 | 50 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 15.2 | 56.9 | | 7.9 | 49.6 | | | 11.7 | 11.7 | 11.7 | 11.7 | |
| Effective Green, g (s) | 15.2 | 56.9 | | 7.9 | 49.6 | | | 11.7 | 11.7 | 11.7 | 11.7 | |
| Actuated g/C Ratio | 0.17 | 0.63 | | 0.09 | 0.55 | | | 0.13 | 0.13 | 0.13 | 0.13 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 298 | 2227 | | 155 | 1875 | | | 241 | 205 | 142 | 214 | |
| v/s Ratio Prot | c0.09 | 0.14 | | 0.04 | c0.14 | | | | | | 0.03 | |
| v/s Ratio Perm | | | | | | | | c0.07 | 0.01 | 0.06 | | |
| v/c Ratio | 0.53 | 0.22 | | 0.46 | 0.25 | | | 0.53 | 0.11 | 0.47 | 0.24 | |
| Uniform Delay, d1 | 34.1 | 7.1 | | 39.0 | 10.5 | | | 36.6 | 34.5 | 36.3 | 35.1 | |
| Progression Factor | 1.35 | 0.31 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 1.7 | 0.2 | | 2.2 | 0.3 | | | 2.2 | 0.2 | 2.5 | 0.6 | |
| Delay (s) | 47.9 | 2.4 | | 41.2 | 10.8 | | | 38.8 | 34.8 | 38.8 | 35.7 | |
| Level of Service | D | A | | D | B | | | D | C | D | D | |
| Approach Delay (s) | | 13.5 | | | 14.7 | | | 36.5 | | | 36.7 | |
| Approach LOS | | B | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 20.8 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.35 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 42.3% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 438 | 433 | 112 | 386 | 0 | 0 | 0 | 0 | 322 | 0 | 177 |
| Future Volume (vph) | 0 | 438 | 433 | 112 | 386 | 0 | 0 | 0 | 0 | 322 | 0 | 177 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.93 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3275 | | 1610 | 3385 | | | | | 1681 | 1681 | 1583 |
| Flt Permitted | | 1.00 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3275 | | 1610 | 3193 | | | | | 1681 | 1681 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 476 | 471 | 122 | 420 | 0 | 0 | 0 | 0 | 350 | 0 | 192 |
| RTOR Reduction (vph) | 0 | 252 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 |
| Lane Group Flow (vph) | 0 | 695 | 0 | 110 | 432 | 0 | 0 | 0 | 0 | 175 | 175 | 69 |
| Turn Type | | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 20.6 | | 7.8 | 32.9 | | | | | 23.4 | 23.4 | 23.4 |
| Effective Green, g (s) | | 20.6 | | 7.8 | 32.9 | | | | | 23.4 | 23.4 | 23.4 |
| Actuated g/C Ratio | | 0.32 | | 0.12 | 0.50 | | | | | 0.36 | 0.36 | 0.36 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1033 | | 192 | 1631 | | | | | 602 | 602 | 567 |
| v/s Ratio Prot | | c0.21 | | c0.07 | 0.03 | | | | | c0.10 | 0.10 | |
| v/s Ratio Perm | | | | | 0.10 | | | | | | | 0.04 |
| v/c Ratio | | 0.67 | | 0.57 | 0.26 | | | | | 0.29 | 0.29 | 0.12 |
| Uniform Delay, d1 | | 19.4 | | 27.2 | 9.3 | | | | | 15.0 | 15.0 | 14.1 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 1.7 | | 4.1 | 0.1 | | | | | 0.3 | 0.3 | 0.4 |
| Delay (s) | | 21.2 | | 31.3 | 9.4 | | | | | 15.3 | 15.3 | 14.5 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 21.2 | | | 13.8 | | | 0.0 | | | 15.0 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 17.6 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.48 | | |
| Actuated Cycle Length (s) | 65.3 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.9% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 266 | 396 | 267 | 139 | 82 | 29 | 167 | 942 | 370 | 55 | 1367 | 216 |
| Future Volume (veh/h) | 266 | 396 | 267 | 139 | 82 | 29 | 167 | 942 | 370 | 55 | 1367 | 216 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 289 | 430 | 290 | 151 | 89 | 32 | 182 | 1024 | 402 | 60 | 1486 | 235 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 758 | 780 | 349 | 242 | 249 | 111 | 250 | 2524 | 786 | 136 | 2356 | 733 |
| Arrive On Green | 0.22 | 0.22 | 0.22 | 0.07 | 0.07 | 0.07 | 0.07 | 0.50 | 0.50 | 0.04 | 0.46 | 0.46 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 289 | 430 | 290 | 151 | 89 | 32 | 182 | 1024 | 402 | 60 | 1486 | 235 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 7.4 | 11.2 | 18.1 | 4.4 | 2.5 | 2.0 | 5.4 | 13.2 | 17.8 | 1.8 | 23.0 | 9.7 |
| Cycle Q Clear(g_c), s | 7.4 | 11.2 | 18.1 | 4.4 | 2.5 | 2.0 | 5.4 | 13.2 | 17.8 | 1.8 | 23.0 | 9.7 |
| 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 | 758 | 780 | 349 | 242 | 249 | 111 | 250 | 2524 | 786 | 136 | 2356 | 733 |
| V/C Ratio(X) | 0.38 | 0.55 | 0.83 | 0.62 | 0.36 | 0.29 | 0.73 | 0.41 | 0.51 | 0.44 | 0.63 | 0.32 |
| Avail Cap(c_a), veh/h | 879 | 904 | 404 | 614 | 631 | 282 | 381 | 2524 | 786 | 182 | 2356 | 733 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 35.9 | 38.6 | 46.9 | 46.0 | 45.8 | 47.1 | 16.5 | 17.6 | 48.7 | 21.1 | 17.6 |
| Incr Delay (d2), s/veh | 0.3 | 0.6 | 12.2 | 2.6 | 0.9 | 1.4 | 4.0 | 0.5 | 2.4 | 2.2 | 1.3 | 1.2 |
| 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 | 3.6 | 5.6 | 9.1 | 2.2 | 1.2 | 0.9 | 2.7 | 6.3 | 8.2 | 0.9 | 11.0 | 4.5 |
| LnGrp Delay(d),s/veh | 34.8 | 36.5 | 50.8 | 49.5 | 46.9 | 47.2 | 51.1 | 17.0 | 20.0 | 50.9 | 22.4 | 18.7 |
| LnGrp LOS | C | D | D | D | D | D | D | B | C | D | C | B |
| Approach Vol, veh/h | | 1009 | | | 272 | | | 1608 | | | 1781 | |
| Approach Delay, s/veh | | 40.1 | | | 48.4 | | | 21.6 | | | 22.9 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 56.0 | | 27.4 | 12.0 | 52.6 | | 11.8 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.5 | 51.5 | | 26.5 | 11.5 | 45.5 | | 18.5 |
| Max Q Clear Time (g_c+I1), s | 3.8 | 19.8 | | 20.1 | 7.4 | 25.0 | | 6.4 |
| Green Ext Time (p_c), s | 0.0 | 10.9 | | 2.7 | 0.2 | 12.1 | | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 27.7 |
| HCM 2010 LOS | C |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 522 | 754 | 943 | 281 | 0 | 1744 |
| Future Volume (veh/h) | 522 | 754 | 943 | 281 | 0 | 1744 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 567 | 820 | 1025 | 305 | 0 | 1896 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1177 | 953 | 2243 | 667 | 0 | 2931 |
| Arrive On Green | 0.34 | 0.34 | 0.58 | 0.58 | 0.00 | 0.58 |
| Sat Flow, veh/h | 3442 | 2787 | 4059 | 1157 | 0 | 5421 |
| Grp Volume(v), veh/h | 567 | 820 | 893 | 437 | 0 | 1896 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1659 | 0 | 1695 |
| Q Serve(g_s), s | 14.3 | 30.2 | 16.7 | 16.7 | 0.0 | 27.7 |
| Cycle Q Clear(g_c), s | 14.3 | 30.2 | 16.7 | 16.7 | 0.0 | 27.7 |
| Prop In Lane | 1.00 | 1.00 | | 0.70 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1177 | 953 | 1954 | 956 | 0 | 2931 |
| V/C Ratio(X) | 0.48 | 0.86 | 0.46 | 0.46 | 0.00 | 0.65 |
| Avail Cap(c_a), veh/h | 1484 | 1201 | 1954 | 956 | 0 | 2931 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.6 | 33.8 | 13.4 | 13.4 | 0.0 | 15.8 |
| Incr Delay (d2), s/veh | 0.3 | 5.4 | 0.8 | 1.6 | 0.0 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.8 | 12.3 | 8.0 | 8.1 | 0.0 | 13.1 |
| LnGrp Delay(d),s/veh | 28.9 | 39.2 | 14.2 | 15.0 | 0.0 | 16.9 |
| LnGrp LOS | C | D | B | B | | B |
| Approach Vol, veh/h | 1387 | | 1330 | | | 1896 |
| Approach Delay, s/veh | 35.0 | | 14.5 | | | 16.9 |
| Approach LOS | C | | B | | | B |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 68.0 | | | | 68.0 | | 42.2 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.5 | | | | 63.5 | | 47.5 |
| Max Q Clear Time (g_c+I1), s | | 18.7 | | | | 29.7 | | 32.2 |
| Green Ext Time (p_c), s | | 13.1 | | | | 20.1 | | 5.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 21.6 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 408 | 974 | 73 | 28 | 503 | 115 | 153 | 99 | 43 | 130 | 64 | 74 |
| Future Volume (veh/h) | 408 | 974 | 73 | 28 | 503 | 115 | 153 | 99 | 43 | 130 | 64 | 74 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 443 | 1059 | 79 | 30 | 547 | 125 | 166 | 108 | 47 | 141 | 70 | 80 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 492 | 1597 | 119 | 53 | 661 | 150 | 278 | 411 | 179 | 320 | 145 | 529 |
| Arrive On Green | 0.28 | 0.48 | 0.48 | 0.03 | 0.23 | 0.23 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 3339 | 249 | 1774 | 2865 | 652 | 1232 | 1232 | 536 | 747 | 436 | 1583 |
| Grp Volume(v), veh/h | 443 | 561 | 577 | 30 | 337 | 335 | 166 | 0 | 155 | 211 | 0 | 80 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1819 | 1774 | 1770 | 1748 | 1232 | 0 | 1768 | 1183 | 0 | 1583 |
| Q Serve(g_s), s | 20.5 | 20.7 | 20.7 | 1.4 | 15.5 | 15.6 | 11.2 | 0.0 | 5.5 | 9.6 | 0.0 | 3.0 |
| Cycle Q Clear(g_c), s | 20.5 | 20.7 | 20.7 | 1.4 | 15.5 | 15.6 | 26.3 | 0.0 | 5.5 | 15.1 | 0.0 | 3.0 |
| Prop In Lane | 1.00 | | 0.14 | 1.00 | | 0.37 | 1.00 | | 0.30 | 0.67 | | 1.00 |
| Lane Grp Cap(c), veh/h | 492 | 846 | 870 | 53 | 408 | 403 | 278 | 0 | 590 | 465 | 0 | 529 |
| V/C Ratio(X) | 0.90 | 0.66 | 0.66 | 0.57 | 0.83 | 0.83 | 0.60 | 0.00 | 0.26 | 0.45 | 0.00 | 0.15 |
| Avail Cap(c_a), veh/h | 717 | 1080 | 1110 | 123 | 487 | 481 | 278 | 0 | 590 | 465 | 0 | 529 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.7 | 17.0 | 17.0 | 40.9 | 31.2 | 31.3 | 35.1 | 0.0 | 20.8 | 25.3 | 0.0 | 20.0 |
| Incr Delay (d2), s/veh | 10.6 | 1.0 | 1.0 | 9.2 | 9.7 | 10.2 | 9.2 | 0.0 | 1.1 | 3.2 | 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 | 11.4 | 10.2 | 10.5 | 0.8 | 8.6 | 8.7 | 4.5 | 0.0 | 2.8 | 4.6 | 0.0 | 1.4 |
| LnGrp Delay(d),s/veh | 40.3 | 18.0 | 18.0 | 50.1 | 40.9 | 41.4 | 44.2 | 0.0 | 21.9 | 28.4 | 0.0 | 20.6 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | C |
| Approach Vol, veh/h | | 1581 | | | 702 | | | 321 | | | 291 | |
| Approach Delay, s/veh | | 24.3 | | | 41.5 | | | 33.4 | | | 26.3 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 33.0 | 7.0 | 45.3 | | 33.0 | 28.2 | 24.2 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 28.5 | 5.9 | 52.1 | | 28.5 | 34.5 | 23.5 |
| Max Q Clear Time (g_c+I1), s | | 28.3 | 3.4 | 22.7 | | 17.1 | 22.5 | 17.6 |
| Green Ext Time (p_c), s | | 0.0 | 0.0 | 9.1 | | 1.1 | 1.2 | 2.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 29.7 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 60 | 859 | 49 | 22 | 578 | 22 | 80 | 25 | 73 | 11 | 2 | 13 |
| Future Volume (veh/h) | 60 | 859 | 49 | 22 | 578 | 22 | 80 | 25 | 73 | 11 | 2 | 13 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 65 | 934 | 53 | 24 | 628 | 24 | 87 | 27 | 79 | 12 | 2 | 14 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 84 | 1107 | 63 | 45 | 1053 | 40 | 180 | 56 | 163 | 369 | 388 | 330 |
| Arrive On Green | 0.05 | 0.32 | 0.32 | 0.03 | 0.30 | 0.30 | 0.23 | 0.23 | 0.23 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3405 | 193 | 1774 | 3476 | 133 | 767 | 238 | 696 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 65 | 485 | 502 | 24 | 319 | 333 | 193 | 0 | 0 | 12 | 2 | 14 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1829 | 1774 | 1770 | 1839 | 1701 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 3.2 | 22.2 | 22.2 | 1.2 | 13.4 | 13.4 | 8.5 | 0.0 | 0.0 | 0.5 | 0.1 | 0.6 |
| Cycle Q Clear(g_c), s | 3.2 | 22.2 | 22.2 | 1.2 | 13.4 | 13.4 | 8.5 | 0.0 | 0.0 | 0.5 | 0.1 | 0.6 |
| Prop In Lane | 1.00 | | 0.11 | 1.00 | | 0.07 | 0.45 | | 0.41 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 84 | 575 | 594 | 45 | 536 | 557 | 399 | 0 | 0 | 369 | 388 | 330 |
| V/C Ratio(X) | 0.78 | 0.84 | 0.84 | 0.53 | 0.60 | 0.60 | 0.48 | 0.00 | 0.00 | 0.03 | 0.01 | 0.04 |
| Avail Cap(c_a), veh/h | 186 | 667 | 690 | 116 | 598 | 622 | 399 | 0 | 0 | 369 | 388 | 330 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 41.0 | 27.3 | 27.3 | 41.9 | 25.8 | 25.8 | 28.7 | 0.0 | 0.0 | 27.4 | 27.3 | 27.5 |
| Incr Delay (d2), s/veh | 14.1 | 8.6 | 8.4 | 9.5 | 1.3 | 1.3 | 4.1 | 0.0 | 0.0 | 0.2 | 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 | 1.9 | 12.2 | 12.5 | 0.7 | 6.7 | 6.9 | 4.4 | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 |
| LnGrp Delay(d),s/veh | 55.1 | 35.9 | 35.7 | 51.4 | 27.1 | 27.1 | 32.9 | 0.0 | 0.0 | 27.6 | 27.3 | 27.7 |
| LnGrp LOS | E | D | D | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 1052 | | | 676 | | | 193 | | | 28 | |
| Approach Delay, s/veh | | 37.0 | | | 27.9 | | | 32.9 | | | 27.7 | |
| Approach LOS | | D | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 24.9 | 6.7 | 32.8 | | 22.6 | 8.6 | 30.9 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 20.4 | 5.7 | 32.8 | | 18.1 | 9.1 | 29.4 |
| Max Q Clear Time (g_c+I1), s | | 10.5 | 3.2 | 24.2 | | 2.6 | 5.2 | 15.4 |
| Green Ext Time (p_c), s | | 0.7 | 0.0 | 4.1 | | 0.0 | 0.0 | 3.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.3 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 197 | 461 | 223 | 235 | 257 | 120 | 216 | 1140 | 150 | 211 | 801 | 98 |
| Future Volume (veh/h) | 197 | 461 | 223 | 235 | 257 | 120 | 216 | 1140 | 150 | 211 | 801 | 98 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 214 | 501 | 242 | 255 | 279 | 130 | 235 | 1239 | 163 | 229 | 871 | 107 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 243 | 664 | 297 | 351 | 362 | 164 | 289 | 2429 | 756 | 284 | 2421 | 754 |
| Arrive On Green | 0.14 | 0.19 | 0.19 | 0.10 | 0.15 | 0.15 | 0.08 | 0.48 | 0.48 | 0.08 | 0.48 | 0.48 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2368 | 1075 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 214 | 501 | 242 | 255 | 207 | 202 | 235 | 1239 | 163 | 229 | 871 | 107 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1673 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 14.2 | 16.1 | 14.1 | 8.6 | 13.4 | 14.0 | 8.1 | 20.2 | 4.8 | 7.8 | 13.0 | 2.7 |
| Cycle Q Clear(g_c), s | 14.2 | 16.1 | 14.1 | 8.6 | 13.4 | 14.0 | 8.1 | 20.2 | 4.8 | 7.8 | 13.0 | 2.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.64 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 243 | 664 | 297 | 351 | 271 | 256 | 289 | 2429 | 756 | 284 | 2421 | 754 |
| V/C Ratio(X) | 0.88 | 0.75 | 0.81 | 0.73 | 0.76 | 0.79 | 0.81 | 0.51 | 0.22 | 0.81 | 0.36 | 0.14 |
| Avail Cap(c_a), veh/h | 303 | 1304 | 583 | 351 | 524 | 495 | 301 | 2429 | 756 | 301 | 2421 | 754 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.53 | 0.53 | 0.53 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 0.74 | 0.74 | 0.74 |
| Uniform Delay (d), s/veh | 50.8 | 46.1 | 30.2 | 52.2 | 48.7 | 49.0 | 54.0 | 21.6 | 8.0 | 54.1 | 19.9 | 6.3 |
| Incr Delay (d2), s/veh | 12.7 | 0.9 | 2.9 | 7.0 | 4.3 | 5.2 | 15.0 | 0.8 | 0.7 | 10.9 | 0.3 | 0.3 |
| 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 | 7.8 | 7.9 | 6.7 | 4.5 | 6.9 | 6.8 | 4.4 | 9.6 | 2.9 | 4.2 | 6.1 | 1.9 |
| LnGrp Delay(d),s/veh | 63.5 | 47.1 | 33.1 | 59.3 | 53.0 | 54.2 | 69.0 | 22.4 | 8.6 | 65.0 | 20.2 | 6.6 |
| LnGrp LOS | E | D | C | E | D | D | E | C | A | E | C | A |
| Approach Vol, veh/h | | 957 | | | 664 | | | 1637 | | | 1207 | |
| Approach Delay, s/veh | | 47.2 | | | 55.8 | | | 27.7 | | | 27.5 | |
| Approach LOS | | D | | | E | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 20.9 | 22.9 | 14.4 | 61.8 | 16.8 | 27.0 | 14.6 | 61.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 35.5 | 10.5 | 35.5 | 11.8 | 44.2 | 10.5 | 35.5 |
| Max Q Clear Time (g_c+I1), s | 16.2 | 16.0 | 9.8 | 22.2 | 10.6 | 18.1 | 10.1 | 15.0 |
| Green Ext Time (p_c), s | 0.2 | 2.4 | 0.1 | 7.6 | 0.1 | 4.5 | 0.0 | 6.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 36.0 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 270 | 502 | 0 | 0 | 153 | 146 | 299 | 4 | 0 | 50 | 0 | 46 |
| Future Volume (veh/h) | 270 | 502 | 0 | 0 | 153 | 146 | 299 | 4 | 0 | 50 | 0 | 46 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 293 | 546 | 0 | 0 | 166 | 159 | 325 | 4 | 0 | 54 | 0 | 50 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 429 | 674 | 0 | 0 | 539 | 252 | 0 | 661 | 0 | 89 | 0 | 0 |
| Arrive On Green | 0.12 | 0.36 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.35 | 0.00 | 0.05 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 54 | |
| Grp Volume(v), veh/h | 293 | 546 | 0 | 0 | 166 | 159 | 0 | 4 | 0 | 54 | 33.4 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | C | |
| Q Serve(g_s), s | 4.7 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Cycle Q Clear(g_c), s | 4.7 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 429 | 674 | 0 | 0 | 539 | 252 | 0 | 661 | 0 | 89 | | |
| V/C Ratio(X) | 0.68 | 0.81 | 0.00 | 0.00 | 0.31 | 0.63 | 0.00 | 0.01 | 0.00 | 0.61 | | |
| Avail Cap(c_a), veh/h | 804 | 1241 | 0 | 0 | 1202 | 561 | 0 | 661 | 0 | 230 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 24.2 | 16.7 | 0.0 | 0.0 | 21.5 | 22.7 | 0.0 | 12.1 | 0.0 | 26.9 | | |
| Incr Delay (d2), s/veh | 1.9 | 2.4 | 0.0 | 0.0 | 0.3 | 2.6 | 0.0 | 0.0 | 0.0 | 6.5 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 2.4 | 8.2 | 0.0 | 0.0 | 1.2 | 2.6 | 0.0 | 0.0 | 0.0 | 1.0 | | |
| LnGrp Delay(d),s/veh | 26.1 | 19.1 | 0.0 | 0.0 | 21.8 | 25.3 | 0.0 | 12.1 | 0.0 | 33.4 | | |
| LnGrp LOS | C | B | | | C | C | | B | | C | | |
| Approach Vol, veh/h | | 839 | | | 325 | | | 4 | | | | |
| Approach Delay, s/veh | | 21.5 | | | 23.5 | | | 12.1 | | | | |
| Approach LOS | | C | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 7.4 | 25.0 | | 25.4 | 0.0 | | 11.7 | 13.7 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 20.5 | | 38.5 | 5.0 | | 13.5 | 20.5 |
| Max Q Clear Time (g_c+I1), s | 3.7 | 2.1 | | 17.3 | 0.0 | | 6.7 | 7.4 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 3.6 | 0.0 | | 0.6 | 1.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.6 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.2 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 33 | 67 | 12 | 21 | 48 | 41 | 5 | 98 | 4 | 16 | 45 | 6 |
| Future Vol, veh/h | 33 | 67 | 12 | 21 | 48 | 41 | 5 | 98 | 4 | 16 | 45 | 6 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 36 | 73 | 13 | 23 | 52 | 45 | 5 | 107 | 4 | 17 | 49 | 7 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.3 | 8.1 | 8.4 | 8.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 29% | 19% | 24% |
| Vol Thru, % | 92% | 60% | 44% | 67% |
| Vol Right, % | 4% | 11% | 37% | 9% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 107 | 112 | 110 | 67 |
| LT Vol | 5 | 33 | 21 | 16 |
| Through Vol | 98 | 67 | 48 | 45 |
| RT Vol | 4 | 12 | 41 | 6 |
| Lane Flow Rate | 116 | 122 | 120 | 73 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.147 | 0.152 | 0.144 | 0.093 |
| Departure Headway (Hd) | 4.555 | 4.506 | 4.333 | 4.613 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 789 | 797 | 829 | 777 |
| Service Time | 2.577 | 2.527 | 2.353 | 2.638 |
| HCM Lane V/C Ratio | 0.147 | 0.153 | 0.145 | 0.094 |
| HCM Control Delay | 8.4 | 8.3 | 8.1 | 8.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.5 | 0.5 | 0.5 | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 56 | 13 | 15 | 94 | 2 | 12 | 4 | 52 | 0 | 6 | 1 |
| Future Vol, veh/h | 0 | 56 | 13 | 15 | 94 | 2 | 12 | 4 | 52 | 0 | 6 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 61 | 14 | 16 | 102 | 2 | 13 | 4 | 57 | 0 | 7 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 104 | 0 | 0 | 75 | 0 | 0 | 207 | 204 | 68 | 234 | 210 | 103 |
| Stage 1 | - | - | - | - | - | - | 68 | 68 | - | 135 | 135 | - |
| Stage 2 | - | - | - | - | - | - | 139 | 136 | - | 99 | 75 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1488 | - | - | 1524 | - | - | 751 | 692 | 995 | 721 | 687 | 952 |
| Stage 1 | - | - | - | - | - | - | 942 | 838 | - | 868 | 785 | - |
| Stage 2 | - | - | - | - | - | - | 864 | 784 | - | 907 | 833 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1488 | - | - | 1524 | - | - | 738 | 684 | 995 | 671 | 679 | 952 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 738 | 684 | - | 671 | 679 | - |
| Stage 1 | - | - | - | - | - | - | 942 | 838 | - | 868 | 776 | - |
| Stage 2 | - | - | - | - | - | - | 846 | 775 | - | 851 | 833 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 1 | 9.3 | 10.1 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 914 | 1488 | - | - | 1524 | - | - | 708 |
| HCM Lane V/C Ratio | 0.081 | - | - | - | 0.011 | - | - | 0.011 |
| HCM Control Delay (s) | 9.3 | 0 | - | - | 7.4 | 0 | - | 10.1 |
| HCM Lane LOS | A | A | - | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.3 | 0 | - | - | 0 | - | - | 0 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 112 | 2 | 10 | 106 | 6 | 6 | 0 | 26 | 0 | 0 | 0 |
| Future Vol, veh/h | 2 | 112 | 2 | 10 | 106 | 6 | 6 | 0 | 26 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 122 | 2 | 11 | 115 | 7 | 7 | 0 | 28 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 122 | 0 | 0 | 124 | 0 | 0 | 268 | 271 | 123 |
| Stage 1 | - | - | - | - | - | - | 127 | 127 | - |
| Stage 2 | - | - | - | - | - | - | 141 | 144 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 6.42 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1465 | - | - | 1463 | - | - | 721 | 636 | 928 |
| Stage 1 | - | - | - | - | - | - | 899 | 791 | - |
| Stage 2 | - | - | - | - | - | - | 886 | 778 | - |
| Platoon blocked, % | | - | - | | - | - | | | |
| Mov Cap-1 Maneuver | 1465 | - | - | 1463 | - | - | 715 | 0 | 928 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 715 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 898 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 879 | 0 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.6 | 9.3 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 879 | 1465 | - | - | 1463 | - | - |
| HCM Lane V/C Ratio | 0.04 | 0.001 | - | - | 0.007 | - | - |
| HCM Control Delay (s) | 9.3 | 7.5 | 0 | - | 7.5 | 0 | - |
| HCM Lane LOS | A | A | A | - | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 67 | 70 | 75 | 1483 | 1335 | 48 |
| Future Volume (veh/h) | 67 | 70 | 75 | 1483 | 1335 | 48 |
| Number | 7 | 14 | 5 | 2 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 73 | 76 | 82 | 1612 | 1451 | 52 |
| Adj No. of Lanes | 1 | 1 | 1 | 3 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 164 | 146 | 125 | 3624 | 2746 | 98 |
| Arrive On Green | 0.09 | 0.09 | 0.07 | 0.71 | 0.54 | 0.54 |
| Sat Flow, veh/h | 1774 | 1583 | 1774 | 5253 | 5208 | 181 |
| Grp Volume(v), veh/h | 73 | 76 | 82 | 1612 | 976 | 527 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1583 | 1774 | 1695 | 1695 | 1831 |
| Q Serve(g_s), s | 1.8 | 2.1 | 2.1 | 6.2 | 8.5 | 8.5 |
| Cycle Q Clear(g_c), s | 1.8 | 2.1 | 2.1 | 6.2 | 8.5 | 8.5 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.10 |
| Lane Grp Cap(c), veh/h | 164 | 146 | 125 | 3624 | 1847 | 997 |
| V/C Ratio(X) | 0.45 | 0.52 | 0.66 | 0.44 | 0.53 | 0.53 |
| Avail Cap(c_a), veh/h | 696 | 621 | 250 | 3624 | 1847 | 997 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.8 | 20.0 | 20.9 | 2.8 | 6.7 | 6.7 |
| Incr Delay (d2), s/veh | 1.9 | 2.8 | 5.7 | 0.4 | 1.1 | 2.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 2.0 | 1.2 | 3.0 | 4.2 | 4.8 |
| LnGrp Delay(d),s/veh | 21.7 | 22.8 | 26.6 | 3.2 | 7.8 | 8.7 |
| LnGrp LOS | C | C | C | A | A | A |
| Approach Vol, veh/h | 149 | | | 1694 | 1503 | |
| Approach Delay, s/veh | 22.3 | | | 4.3 | 8.1 | |
| Approach LOS | C | | | A | A | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | 5 | 6 | | |
| Phs Duration (G+Y+Rc), s | | 37.4 | | 8.8 | 7.8 | 29.6 | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | 4.5 | 4.5 | | |
| Max Green Setting (Gmax), s | | 32.9 | | 18.1 | 6.5 | 21.9 | | |
| Max Q Clear Time (g_c+I1), s | | 8.2 | | 4.1 | 4.1 | 10.5 | | |
| Green Ext Time (p_c), s | | 13.8 | | 0.3 | 0.0 | 7.4 | | |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 6.8 |
| HCM 2010 LOS | A |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 18 | 16 | 22 | 24 | 8 | 18 | 7 |
| Future Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 18 | 16 | 22 | 24 | 8 | 18 | 7 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 71 | 34 | 24 | 36 | 20 | 17 | 24 | 26 | 9 | 20 | 8 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8 | 7.7 | 7.7 | 7.6 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 26% | 29% | 30% | 24% |
| Vol Thru, % | 35% | 48% | 45% | 55% |
| Vol Right, % | 39% | 23% | 25% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 62 | 135 | 73 | 33 |
| LT Vol | 16 | 39 | 22 | 8 |
| Through Vol | 22 | 65 | 33 | 18 |
| RT Vol | 24 | 31 | 18 | 7 |
| Lane Flow Rate | 67 | 147 | 79 | 36 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.08 | 0.167 | 0.091 | 0.044 |
| Departure Headway (Hd) | 4.289 | 4.095 | 4.139 | 4.425 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 840 | 864 | 851 | 814 |
| Service Time | 2.29 | 2.175 | 2.235 | 2.427 |
| HCM Lane V/C Ratio | 0.08 | 0.17 | 0.093 | 0.044 |
| HCM Control Delay | 7.7 | 8 | 7.7 | 7.6 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.6 | 0.3 | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 109 | 82 | 1391 | 37 | 181 | 1159 |
| Future Volume (veh/h) | 109 | 82 | 1391 | 37 | 181 | 1159 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 118 | 89 | 1512 | 40 | 197 | 1260 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 140 | 106 | 3806 | 101 | 298 | 3799 |
| Arrive On Green | 0.15 | 0.15 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 957 | 722 | 5262 | 135 | 331 | 5253 |
| Grp Volume(v), veh/h | 208 | 0 | 1006 | 546 | 197 | 1260 |
| Grp Sat Flow(s),veh/h/ln | 1687 | 0 | 1695 | 1839 | 331 | 1695 |
| Q Serve(g_s), s | 10.1 | 0.0 | 9.0 | 9.0 | 44.4 | 7.0 |
| Cycle Q Clear(g_c), s | 10.1 | 0.0 | 9.0 | 9.0 | 53.4 | 7.0 |
| Prop In Lane | 0.57 | 0.43 | | 0.07 | 1.00 | |
| Lane Grp Cap(c), veh/h | 247 | 0 | 2533 | 1374 | 298 | 3799 |
| V/C Ratio(X) | 0.84 | 0.00 | 0.40 | 0.40 | 0.66 | 0.33 |
| Avail Cap(c_a), veh/h | 360 | 0 | 2533 | 1374 | 298 | 3799 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.1 | 0.0 | 3.8 | 3.8 | 13.4 | 3.6 |
| Incr Delay (d2), s/veh | 11.4 | 0.0 | 0.5 | 0.9 | 11.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.5 | 0.0 | 4.4 | 4.9 | 4.9 | 3.3 |
| LnGrp Delay(d),s/veh | 46.5 | 0.0 | 4.3 | 4.7 | 24.5 | 3.8 |
| LnGrp LOS | D | | A | A | C | A |
| Approach Vol, veh/h | 208 | | 1552 | | | 1457 |
| Approach Delay, s/veh | 46.5 | | 4.4 | | | 6.6 |
| Approach LOS | D | | A | | | A |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 67.5 | | | | 67.5 | | 16.8 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.0 | | | | 63.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 11.0 | | | | 55.4 | | 12.1 |
| Green Ext Time (p_c), s | | 16.8 | | | | 5.9 | | 0.3 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 8.1 |
| HCM 2010 LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1197 | 13 | 50 | 1070 | 149 |
| Future Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1197 | 13 | 50 | 1070 | 149 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 154 | 85 | 134 | 58 | 100 | 17 | 136 | 1301 | 14 | 54 | 1163 | 162 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 196 | 108 | 267 | 78 | 134 | 183 | 172 | 2191 | 24 | 81 | 1676 | 233 |
| Arrive On Green | 0.17 | 0.17 | 0.17 | 0.12 | 0.12 | 0.12 | 0.10 | 0.42 | 0.42 | 0.05 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1163 | 642 | 1583 | 671 | 1158 | 1583 | 1774 | 5187 | 56 | 1774 | 4514 | 628 |
| Grp Volume(v), veh/h | 239 | 0 | 134 | 158 | 0 | 17 | 136 | 850 | 465 | 54 | 873 | 452 |
| Grp Sat Flow(s),veh/h/ln | 1805 | 0 | 1583 | 1829 | 0 | 1583 | 1774 | 1695 | 1853 | 1774 | 1695 | 1752 |
| Q Serve(g_s), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 14.0 | 14.1 | 2.2 | 15.9 | 15.9 |
| Cycle Q Clear(g_c), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 14.0 | 14.1 | 2.2 | 15.9 | 15.9 |
| Prop In Lane | 0.64 | | 1.00 | 0.37 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 0.36 |
| Lane Grp Cap(c), veh/h | 304 | 0 | 267 | 211 | 0 | 183 | 172 | 1432 | 783 | 81 | 1259 | 651 |
| V/C Ratio(X) | 0.79 | 0.00 | 0.50 | 0.75 | 0.00 | 0.09 | 0.79 | 0.59 | 0.59 | 0.67 | 0.69 | 0.69 |
| Avail Cap(c_a), veh/h | 449 | 0 | 394 | 456 | 0 | 394 | 237 | 1432 | 783 | 125 | 1259 | 651 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.9 | 0.0 | 27.4 | 31.1 | 0.0 | 28.7 | 32.1 | 16.2 | 16.2 | 34.1 | 19.3 | 19.3 |
| Incr Delay (d2), s/veh | 5.4 | 0.0 | 1.5 | 5.2 | 0.0 | 0.2 | 11.8 | 1.8 | 3.3 | 9.0 | 3.2 | 6.0 |
| 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 | 5.0 | 0.0 | 2.5 | 3.4 | 0.0 | 0.3 | 3.2 | 6.9 | 7.8 | 1.3 | 8.0 | 8.7 |
| LnGrp Delay(d),s/veh | 34.4 | 0.0 | 28.9 | 36.3 | 0.0 | 28.9 | 43.9 | 18.0 | 19.5 | 43.2 | 22.5 | 25.4 |
| LnGrp LOS | C | | C | D | | C | D | B | B | D | C | C |
| Approach Vol, veh/h | | 373 | | | 175 | | | 1451 | | | 1379 | |
| Approach Delay, s/veh | | 32.4 | | | 35.6 | | | 20.9 | | | 24.3 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 7.8 | 35.2 | | 16.8 | 11.5 | 31.5 | | 12.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.1 | 30.7 | | 18.1 | 9.7 | 26.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 4.2 | 16.1 | | 11.2 | 7.4 | 17.9 | | 8.1 |
| Green Ext Time (p_c), s | 0.0 | 7.7 | | 1.0 | 0.1 | 5.2 | | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 24.3 |
| HCM 2010 LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 263 | 408 | 0 | 1640 | 1467 | 729 |
| Future Volume (vph) | 263 | 408 | 0 | 1640 | 1467 | 729 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.94 | 0.85 | | 1.00 | 0.95 | |
| Flt Protected | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3290 | 1441 | | 5085 | 4832 | |
| Flt Permitted | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3290 | 1441 | | 5085 | 4832 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 286 | 443 | 0 | 1783 | 1595 | 792 |
| RTOR Reduction (vph) | 37 | 37 | 0 | 0 | 46 | 0 |
| Lane Group Flow (vph) | 457 | 198 | 0 | 1783 | 2341 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 25.1 | 25.1 | | 101.7 | 101.7 | |
| Effective Green, g (s) | 25.1 | 25.1 | | 101.7 | 101.7 | |
| Actuated g/C Ratio | 0.18 | 0.18 | | 0.75 | 0.75 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 608 | 266 | | 3808 | 3618 | |
| v/s Ratio Prot | c0.14 | | | 0.35 | c0.48 | |
| v/s Ratio Perm | | 0.14 | | | | |
| v/c Ratio | 0.75 | 0.74 | | 0.47 | 0.65 | |
| Uniform Delay, d1 | 52.4 | 52.3 | | 6.6 | 8.3 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 5.2 | 10.6 | | 0.4 | 0.9 | |
| Delay (s) | 57.6 | 62.9 | | 7.0 | 9.2 | |
| Level of Service | E | E | | A | A | |
| Approach Delay (s) | 59.3 | | | 7.0 | 9.2 | |
| Approach LOS | E | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 15.9 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.67 | | |
| Actuated Cycle Length (s) | 135.8 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 69.0% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 530 | 163 | 424 | 786 | 0 | 0 | 0 | 0 | 222 | 101 | 308 |
| Future Volume (vph) | 0 | 530 | 163 | 424 | 786 | 0 | 0 | 0 | 0 | 222 | 101 | 308 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.93 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2940 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2940 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 576 | 177 | 461 | 854 | 0 | 0 | 0 | 0 | 241 | 110 | 335 |
| RTOR Reduction (vph) | 0 | 0 | 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 96 |
| Lane Group Flow (vph) | 0 | 576 | 37 | 461 | 854 | 0 | 0 | 0 | 0 | 178 | 245 | 71 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 15.3 | 15.3 | 15.0 | 34.8 | | | | | 28.8 | 28.8 | 28.8 |
| Effective Green, g (s) | | 15.3 | 15.3 | 15.0 | 34.8 | | | | | 28.8 | 28.8 | 28.8 |
| Actuated g/C Ratio | | 0.21 | 0.21 | 0.21 | 0.48 | | | | | 0.40 | 0.40 | 0.40 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1071 | 333 | 709 | 1696 | | | | | 638 | 1166 | 571 |
| v/s Ratio Prot | | 0.11 | | c0.13 | c0.24 | | | | | c0.11 | 0.08 | |
| v/s Ratio Perm | | | 0.02 | | | | | | | | | 0.05 |
| v/c Ratio | | 0.54 | 0.11 | 0.65 | 0.50 | | | | | 0.28 | 0.21 | 0.12 |
| Uniform Delay, d1 | | 25.5 | 23.2 | 26.4 | 13.0 | | | | | 14.9 | 14.4 | 13.9 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.1 | 2.1 | 0.2 | | | | | 0.2 | 0.1 | 0.4 |
| Delay (s) | | 26.0 | 23.3 | 28.5 | 13.2 | | | | | 15.1 | 14.5 | 14.3 |
| Level of Service | | C | C | C | B | | | | | B | B | B |
| Approach Delay (s) | | 25.4 | | | 18.6 | | | 0.0 | | | 14.6 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.5 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.45 | | |
| Actuated Cycle Length (s) | 72.6 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 71.1% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 205 | 562 | 0 | 0 | 972 | 550 | 253 | 377 | 298 | 0 | 0 | 0 |
| Future Volume (vph) | 205 | 562 | 0 | 0 | 972 | 550 | 253 | 377 | 298 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.99 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1673 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1673 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 223 | 611 | 0 | 0 | 1057 | 598 | 275 | 410 | 324 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 3 | 130 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 223 | 611 | 0 | 0 | 1057 | 524 | 247 | 467 | 162 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 9.7 | 51.1 | | | 36.9 | 36.9 | 24.7 | 24.7 | 24.7 | | | |
| Effective Green, g (s) | 9.7 | 51.1 | | | 36.9 | 36.9 | 24.7 | 24.7 | 24.7 | | | |
| Actuated g/C Ratio | 0.11 | 0.60 | | | 0.44 | 0.44 | 0.29 | 0.29 | 0.29 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 392 | 2132 | | | 1539 | 688 | 489 | 487 | 438 | | | |
| v/s Ratio Prot | c0.06 | 0.17 | | | 0.30 | | 0.15 | c0.28 | | | | |
| v/s Ratio Perm | | | | | | c0.33 | | | 0.11 | | | |
| v/c Ratio | 0.57 | 0.29 | | | 0.69 | 0.76 | 0.51 | 0.96 | 0.37 | | | |
| Uniform Delay, d1 | 35.6 | 8.1 | | | 19.3 | 20.2 | 25.0 | 29.6 | 23.9 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 1.9 | 0.1 | | | 1.3 | 5.0 | 0.8 | 30.2 | 2.4 | | | |
| Delay (s) | 37.5 | 8.2 | | | 20.6 | 25.2 | 25.8 | 59.8 | 26.3 | | | |
| Level of Service | D | A | | | C | C | C | E | C | | | |
| Approach Delay (s) | | 16.0 | | | 22.3 | | | 41.8 | | | 0.0 | |
| Approach LOS | | B | | | C | | | D | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.4 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.80 | | |
| Actuated Cycle Length (s) | 84.8 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 71.1% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 91 | 313 | 107 | 19 | 722 | 223 | 48 | 222 | 8 | 159 | 266 | 220 |
| Future Volume (vph) | 91 | 313 | 107 | 19 | 722 | 223 | 48 | 222 | 8 | 159 | 266 | 220 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 0.95 | |
| Frt | 1.00 | 0.96 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 0.93 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3404 | | 1770 | 3414 | | 1770 | 1853 | | 1770 | 3299 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3404 | | 1770 | 3414 | | 1770 | 1853 | | 1770 | 3299 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 99 | 340 | 116 | 21 | 785 | 242 | 52 | 241 | 9 | 173 | 289 | 239 |
| RTOR Reduction (vph) | 0 | 34 | 0 | 0 | 35 | 0 | 0 | 1 | 0 | 0 | 145 | 0 |
| Lane Group Flow (vph) | 99 | 422 | 0 | 21 | 992 | 0 | 52 | 249 | 0 | 173 | 383 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | |
| Actuated Green, G (s) | 9.8 | 28.6 | | 7.6 | 26.4 | | 6.9 | 22.9 | | 12.9 | 28.9 | |
| Effective Green, g (s) | 9.8 | 28.6 | | 7.6 | 26.4 | | 6.9 | 22.9 | | 12.9 | 28.9 | |
| Actuated g/C Ratio | 0.11 | 0.32 | | 0.08 | 0.29 | | 0.08 | 0.25 | | 0.14 | 0.32 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 192 | 1081 | | 149 | 1001 | | 135 | 471 | | 253 | 1059 | |
| v/s Ratio Prot | c0.06 | 0.12 | | 0.01 | c0.29 | | 0.03 | c0.13 | | c0.10 | 0.12 | |
| v/s Ratio Perm | | | | | | | | | | | | |
| v/c Ratio | 0.52 | 0.39 | | 0.14 | 0.99 | | 0.39 | 0.53 | | 0.68 | 0.36 | |
| Uniform Delay, d1 | 37.9 | 23.9 | | 38.2 | 31.7 | | 39.5 | 28.9 | | 36.6 | 23.5 | |
| Progression Factor | 1.00 | 1.00 | | 0.68 | 0.52 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 2.3 | 1.1 | | 0.4 | 24.7 | | 1.8 | 4.2 | | 7.4 | 1.0 | |
| Delay (s) | 40.2 | 25.0 | | 26.3 | 41.1 | | 41.4 | 33.1 | | 44.0 | 24.4 | |
| Level of Service | D | C | | C | D | | D | C | | D | C | |
| Approach Delay (s) | | 27.7 | | | 40.8 | | | 34.5 | | | 29.3 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 34.2 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.72 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 68.1% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 71 | 387 | 11 | 147 | 715 | 65 | 11 | 68 | 116 | 90 | 107 | 216 |
| Future Volume (vph) | 71 | 387 | 11 | 147 | 715 | 65 | 11 | 68 | 116 | 90 | 107 | 216 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | | 1.00 | 0.85 | 1.00 | 0.90 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3525 | | 1770 | 3495 | | | 1850 | 1583 | 1770 | 1676 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.72 | 1.00 | 0.70 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3525 | | 1770 | 3495 | | | 1337 | 1583 | 1306 | 1676 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 77 | 421 | 12 | 160 | 777 | 71 | 12 | 74 | 126 | 98 | 116 | 235 |
| RTOR Reduction (vph) | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 100 | 0 | 92 | 0 |
| Lane Group Flow (vph) | 77 | 431 | 0 | 160 | 842 | 0 | 0 | 86 | 26 | 98 | 259 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 14.6 | 45.2 | | 12.4 | 43.0 | | | 18.9 | 18.9 | 18.9 | 18.9 | |
| Effective Green, g (s) | 14.6 | 45.2 | | 12.4 | 43.0 | | | 18.9 | 18.9 | 18.9 | 18.9 | |
| Actuated g/C Ratio | 0.16 | 0.50 | | 0.14 | 0.48 | | | 0.21 | 0.21 | 0.21 | 0.21 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 287 | 1770 | | 243 | 1669 | | | 280 | 332 | 274 | 351 | |
| v/s Ratio Prot | 0.04 | 0.12 | | c0.09 | c0.24 | | | | | | c0.15 | |
| v/s Ratio Perm | | | | | | | | 0.06 | 0.02 | 0.08 | | |
| v/c Ratio | 0.27 | 0.24 | | 0.66 | 0.50 | | | 0.31 | 0.08 | 0.36 | 0.74 | |
| Uniform Delay, d1 | 33.0 | 12.7 | | 36.8 | 16.2 | | | 30.0 | 28.6 | 30.4 | 33.2 | |
| Progression Factor | 1.05 | 0.25 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 0.4 | 0.3 | | 6.3 | 1.1 | | | 0.6 | 0.1 | 0.8 | 7.8 | |
| Delay (s) | 35.1 | 3.5 | | 43.1 | 17.3 | | | 30.6 | 28.7 | 31.2 | 41.1 | |
| Level of Service | D | A | | D | B | | | C | C | C | D | |
| Approach Delay (s) | | 8.3 | | | 21.4 | | | 29.5 | | | 38.9 | |
| Approach LOS | | A | | | C | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 22.7 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.57 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 2 | 326 | 400 | 237 | 564 | 0 | 0 | 0 | 0 | 229 | 2 | 371 |
| Future Volume (vph) | 2 | 326 | 400 | 237 | 564 | 0 | 0 | 0 | 0 | 229 | 2 | 371 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.92 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3247 | | 1610 | 3383 | | | | | 1681 | 1687 | 1583 |
| Flt Permitted | | 0.95 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3096 | | 1610 | 3180 | | | | | 1681 | 1687 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 2 | 354 | 435 | 258 | 613 | 0 | 0 | 0 | 0 | 249 | 2 | 403 |
| RTOR Reduction (vph) | 0 | 293 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 209 |
| Lane Group Flow (vph) | 0 | 498 | 0 | 232 | 639 | 0 | 0 | 0 | 0 | 124 | 127 | 194 |
| Turn Type | Perm | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | 4 | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 17.3 | | 14.6 | 36.4 | | | | | 24.0 | 24.0 | 24.0 |
| Effective Green, g (s) | | 17.3 | | 14.6 | 36.4 | | | | | 24.0 | 24.0 | 24.0 |
| Actuated g/C Ratio | | 0.25 | | 0.21 | 0.52 | | | | | 0.35 | 0.35 | 0.35 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 771 | | 338 | 1710 | | | | | 581 | 583 | 547 |
| v/s Ratio Prot | | | | c0.14 | 0.08 | | | | | 0.07 | 0.08 | |
| v/s Ratio Perm | | c0.16 | | | 0.12 | | | | | | | c0.12 |
| v/c Ratio | | 0.65 | | 0.69 | 0.37 | | | | | 0.21 | 0.22 | 0.35 |
| Uniform Delay, d1 | | 23.3 | | 25.3 | 9.8 | | | | | 16.0 | 16.1 | 16.9 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 1.9 | | 5.7 | 0.1 | | | | | 0.2 | 0.2 | 1.8 |
| Delay (s) | | 25.2 | | 31.0 | 9.9 | | | | | 16.2 | 16.2 | 18.7 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 25.2 | | | 15.5 | | | 0.0 | | | 17.8 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.5 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.53 | | |
| Actuated Cycle Length (s) | 69.4 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 55.2% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 405 | 254 | 174 | 452 | 363 | 167 | 266 | 1522 | 351 | 141 | 1121 | 363 |
| Future Volume (veh/h) | 405 | 254 | 174 | 452 | 363 | 167 | 266 | 1522 | 351 | 141 | 1121 | 363 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 440 | 276 | 189 | 491 | 395 | 182 | 289 | 1654 | 382 | 153 | 1218 | 395 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 551 | 567 | 254 | 621 | 639 | 286 | 350 | 2358 | 734 | 206 | 2146 | 668 |
| Arrive On Green | 0.16 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.10 | 0.46 | 0.46 | 0.06 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 440 | 276 | 189 | 491 | 395 | 182 | 289 | 1654 | 382 | 153 | 1218 | 395 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 16.3 | 9.4 | 15.1 | 18.1 | 13.7 | 14.1 | 10.9 | 34.3 | 22.6 | 5.8 | 24.1 | 25.5 |
| Cycle Q Clear(g_c), s | 16.3 | 9.4 | 15.1 | 18.1 | 13.7 | 14.1 | 10.9 | 34.3 | 22.6 | 5.8 | 24.1 | 25.5 |
| 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 | 551 | 567 | 254 | 621 | 639 | 286 | 350 | 2358 | 734 | 206 | 2146 | 668 |
| V/C Ratio(X) | 0.80 | 0.49 | 0.75 | 0.79 | 0.62 | 0.64 | 0.83 | 0.70 | 0.52 | 0.74 | 0.57 | 0.59 |
| Avail Cap(c_a), veh/h | 714 | 734 | 328 | 791 | 814 | 364 | 506 | 2358 | 734 | 324 | 2146 | 668 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.6 | 50.7 | 53.1 | 52.0 | 50.1 | 50.3 | 58.4 | 28.3 | 25.1 | 61.3 | 29.1 | 29.5 |
| Incr Delay (d2), s/veh | 4.9 | 0.6 | 6.6 | 4.2 | 1.0 | 2.4 | 7.4 | 1.8 | 2.6 | 5.2 | 1.1 | 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 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.1 | 4.7 | 7.0 | 9.0 | 6.8 | 6.3 | 5.6 | 16.5 | 10.4 | 2.9 | 11.5 | 11.8 |
| LnGrp Delay(d),s/veh | 58.5 | 51.4 | 59.7 | 56.2 | 51.1 | 52.7 | 65.8 | 30.0 | 27.8 | 66.5 | 30.2 | 33.3 |
| LnGrp LOS | E | D | E | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 905 | | | 1068 | | | 2325 | | | 1766 | |
| Approach Delay, s/veh | | 56.6 | | | 53.7 | | | 34.1 | | | 34.1 | |
| Approach LOS | | E | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 12.5 | 66.0 | | 25.7 | 18.0 | 60.5 | | 28.4 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 12.5 | 61.5 | | 27.5 | 19.5 | 54.5 | | 30.5 |
| Max Q Clear Time (g_c+I1), s | 7.8 | 36.3 | | 18.3 | 12.9 | 27.5 | | 20.1 |
| Green Ext Time (p_c), s | 0.2 | 16.1 | | 2.9 | 0.5 | 12.3 | | 3.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 40.9 |
| HCM 2010 LOS | D |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 477 | 1124 | 1499 | 372 | 0 | 1717 |
| Future Volume (veh/h) | 477 | 1124 | 1499 | 372 | 0 | 1717 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 518 | 1222 | 1629 | 404 | 0 | 1866 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1610 | 1304 | 1918 | 470 | 0 | 2392 |
| Arrive On Green | 0.47 | 0.47 | 0.47 | 0.47 | 0.00 | 0.47 |
| Sat Flow, veh/h | 3442 | 2787 | 4245 | 999 | 0 | 5421 |
| Grp Volume(v), veh/h | 518 | 1222 | 1351 | 682 | 0 | 1866 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1686 | 0 | 1695 |
| Q Serve(g_s), s | 13.7 | 60.5 | 51.1 | 52.4 | 0.0 | 44.7 |
| Cycle Q Clear(g_c), s | 13.7 | 60.5 | 51.1 | 52.4 | 0.0 | 44.7 |
| Prop In Lane | 1.00 | 1.00 | | 0.59 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1610 | 1304 | 1595 | 793 | 0 | 2392 |
| V/C Ratio(X) | 0.32 | 0.94 | 0.85 | 0.86 | 0.00 | 0.78 |
| Avail Cap(c_a), veh/h | 1714 | 1387 | 1595 | 793 | 0 | 2392 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.3 | 36.7 | 33.9 | 34.3 | 0.0 | 32.3 |
| Incr Delay (d2), s/veh | 0.1 | 11.8 | 5.8 | 11.7 | 0.0 | 2.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.6 | 25.4 | 25.1 | 26.8 | 0.0 | 21.5 |
| LnGrp Delay(d),s/veh | 24.4 | 48.6 | 39.7 | 46.0 | 0.0 | 34.9 |
| LnGrp LOS | C | D | D | D | | C |
| Approach Vol, veh/h | 1740 | | 2033 | | | 1866 |
| Approach Delay, s/veh | 41.4 | | 41.8 | | | 34.9 |
| Approach LOS | D | | D | | | C |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 73.0 | | | | 73.0 | | 72.6 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 68.5 | | | | 68.5 | | 72.5 |
| Max Q Clear Time (g_c+I1), s | | 54.4 | | | | 46.7 | | 62.5 |
| Green Ext Time (p_c), s | | 11.1 | | | | 14.8 | | 5.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 39.4 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 206 | 553 | 105 | 34 | 974 | 133 | 91 | 71 | 20 | 133 | 114 | 357 |
| Future Volume (veh/h) | 206 | 553 | 105 | 34 | 974 | 133 | 91 | 71 | 20 | 133 | 114 | 357 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 224 | 601 | 114 | 37 | 1059 | 145 | 99 | 77 | 22 | 145 | 124 | 388 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 262 | 1485 | 281 | 59 | 1206 | 165 | 204 | 447 | 128 | 288 | 217 | 507 |
| Arrive On Green | 0.15 | 0.50 | 0.50 | 0.03 | 0.39 | 0.39 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1774 | 2971 | 562 | 1774 | 3129 | 428 | 885 | 1394 | 398 | 710 | 676 | 1583 |
| Grp Volume(v), veh/h | 224 | 357 | 358 | 37 | 598 | 606 | 99 | 0 | 99 | 269 | 0 | 388 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1764 | 1774 | 1770 | 1787 | 885 | 0 | 1792 | 1386 | 0 | 1583 |
| Q Serve(g_s), s | 11.3 | 11.7 | 11.7 | 1.9 | 28.9 | 29.0 | 10.0 | 0.0 | 3.7 | 12.8 | 0.0 | 20.3 |
| Cycle Q Clear(g_c), s | 11.3 | 11.7 | 11.7 | 1.9 | 28.9 | 29.0 | 26.4 | 0.0 | 3.7 | 16.4 | 0.0 | 20.3 |
| Prop In Lane | 1.00 | | 0.32 | 1.00 | | 0.24 | 1.00 | | 0.22 | 0.54 | | 1.00 |
| Lane Grp Cap(c), veh/h | 262 | 884 | 881 | 59 | 682 | 689 | 204 | 0 | 574 | 504 | 0 | 507 |
| V/C Ratio(X) | 0.86 | 0.40 | 0.41 | 0.63 | 0.88 | 0.88 | 0.49 | 0.00 | 0.17 | 0.53 | 0.00 | 0.76 |
| Avail Cap(c_a), veh/h | 357 | 975 | 971 | 121 | 740 | 747 | 204 | 0 | 574 | 504 | 0 | 507 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 38.3 | 14.4 | 14.5 | 43.9 | 26.3 | 26.3 | 38.2 | 0.0 | 22.5 | 27.6 | 0.0 | 28.2 |
| Incr Delay (d2), s/veh | 14.0 | 0.3 | 0.3 | 10.5 | 11.0 | 11.1 | 8.1 | 0.0 | 0.7 | 4.0 | 0.0 | 10.5 |
| 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 | 6.6 | 5.7 | 5.7 | 1.1 | 16.2 | 16.4 | 2.9 | 0.0 | 1.9 | 6.4 | 0.0 | 10.3 |
| LnGrp Delay(d),s/veh | 52.3 | 14.7 | 14.8 | 54.4 | 37.3 | 37.4 | 46.3 | 0.0 | 23.2 | 31.6 | 0.0 | 38.6 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | D |
| Approach Vol, veh/h | | 939 | | | 1241 | | | 198 | | | 657 | |
| Approach Delay, s/veh | | 23.7 | | | 37.9 | | | 34.7 | | | 35.8 | |
| Approach LOS | | C | | | D | | | C | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 34.0 | 7.6 | 50.5 | | 34.0 | 18.1 | 40.0 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 29.5 | 6.3 | 50.7 | | 29.5 | 18.5 | 38.5 |
| Max Q Clear Time (g_c+I1), s | | 28.4 | 3.9 | 13.7 | | 22.3 | 13.3 | 31.0 |
| Green Ext Time (p_c), s | | 0.1 | 0.0 | 5.2 | | 1.9 | 0.3 | 4.5 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 32.8 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 19 | 615 | 39 | 30 | 875 | 27 | 81 | 13 | 57 | 29 | 18 | 91 |
| Future Volume (veh/h) | 19 | 615 | 39 | 30 | 875 | 27 | 81 | 13 | 57 | 29 | 18 | 91 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 21 | 668 | 42 | 33 | 951 | 29 | 88 | 14 | 62 | 32 | 20 | 99 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 40 | 1083 | 68 | 55 | 1152 | 35 | 220 | 35 | 155 | 367 | 385 | 328 |
| Arrive On Green | 0.02 | 0.32 | 0.32 | 0.03 | 0.33 | 0.33 | 0.24 | 0.24 | 0.24 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3382 | 212 | 1774 | 3507 | 107 | 914 | 145 | 644 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 21 | 349 | 361 | 33 | 480 | 500 | 164 | 0 | 0 | 32 | 20 | 99 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1825 | 1774 | 1770 | 1844 | 1703 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 1.0 | 14.9 | 15.0 | 1.6 | 22.3 | 22.3 | 7.2 | 0.0 | 0.0 | 1.3 | 0.8 | 4.7 |
| Cycle Q Clear(g_c), s | 1.0 | 14.9 | 15.0 | 1.6 | 22.3 | 22.3 | 7.2 | 0.0 | 0.0 | 1.3 | 0.8 | 4.7 |
| Prop In Lane | 1.00 | | 0.12 | 1.00 | | 0.06 | 0.54 | | 0.38 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 40 | 566 | 584 | 55 | 582 | 606 | 410 | 0 | 0 | 367 | 385 | 328 |
| V/C Ratio(X) | 0.52 | 0.62 | 0.62 | 0.59 | 0.83 | 0.83 | 0.40 | 0.00 | 0.00 | 0.09 | 0.05 | 0.30 |
| Avail Cap(c_a), veh/h | 109 | 703 | 725 | 129 | 722 | 753 | 410 | 0 | 0 | 367 | 385 | 328 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 43.2 | 25.8 | 25.8 | 42.8 | 27.7 | 27.7 | 28.5 | 0.0 | 0.0 | 28.6 | 28.4 | 30.0 |
| Incr Delay (d2), s/veh | 10.0 | 1.1 | 1.1 | 9.8 | 6.4 | 6.2 | 2.9 | 0.0 | 0.0 | 0.5 | 0.3 | 2.4 |
| 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 | 0.6 | 7.4 | 7.7 | 1.0 | 12.0 | 12.4 | 3.7 | 0.0 | 0.0 | 0.7 | 0.4 | 2.3 |
| LnGrp Delay(d),s/veh | 53.2 | 26.8 | 26.8 | 52.5 | 34.1 | 33.8 | 31.4 | 0.0 | 0.0 | 29.1 | 28.7 | 32.4 |
| LnGrp LOS | D | C | C | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 731 | | | 1013 | | | 164 | | | 151 | |
| Approach Delay, s/veh | | 27.6 | | | 34.5 | | | 31.4 | | | 31.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 26.0 | 7.3 | 33.1 | | 23.0 | 6.5 | 33.9 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 21.5 | 6.5 | 35.5 | | 18.5 | 5.5 | 36.5 |
| Max Q Clear Time (g_c+I1), s | | 9.2 | 3.6 | 17.0 | | 6.7 | 3.0 | 24.3 |
| Green Ext Time (p_c), s | | 0.7 | 0.0 | 4.3 | | 0.3 | 0.0 | 5.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 31.6 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 177 | 276 | 239 | 306 | 445 | 196 | 337 | 1431 | 135 | 316 | 1261 | 187 |
| Future Volume (veh/h) | 177 | 276 | 239 | 306 | 445 | 196 | 337 | 1431 | 135 | 316 | 1261 | 187 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 192 | 300 | 260 | 333 | 484 | 213 | 366 | 1555 | 147 | 343 | 1371 | 203 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 216 | 552 | 247 | 688 | 560 | 245 | 421 | 2033 | 633 | 399 | 2001 | 623 |
| Arrive On Green | 0.12 | 0.16 | 0.16 | 0.20 | 0.23 | 0.23 | 0.12 | 0.40 | 0.40 | 0.12 | 0.39 | 0.39 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2398 | 1049 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 192 | 300 | 260 | 333 | 356 | 341 | 366 | 1555 | 147 | 343 | 1371 | 203 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1678 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 14.9 | 10.9 | 17.0 | 12.0 | 27.1 | 27.3 | 14.6 | 37.0 | 4.8 | 13.7 | 31.3 | 8.7 |
| Cycle Q Clear(g_c), s | 14.9 | 10.9 | 17.0 | 12.0 | 27.1 | 27.3 | 14.6 | 37.0 | 4.8 | 13.7 | 31.3 | 8.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.63 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 216 | 552 | 247 | 688 | 414 | 392 | 421 | 2033 | 633 | 399 | 2001 | 623 |
| V/C Ratio(X) | 0.89 | 0.54 | 1.05 | 0.48 | 0.86 | 0.87 | 0.87 | 0.77 | 0.23 | 0.86 | 0.69 | 0.33 |
| Avail Cap(c_a), veh/h | 260 | 1024 | 458 | 688 | 512 | 485 | 504 | 2033 | 633 | 504 | 2001 | 623 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.77 | 0.77 | 0.77 | 0.46 | 0.46 | 0.46 | 1.00 | 1.00 | 1.00 | 0.70 | 0.70 | 0.70 |
| Uniform Delay (d), s/veh | 60.5 | 54.5 | 35.9 | 49.6 | 51.5 | 51.6 | 60.3 | 36.3 | 8.7 | 60.8 | 35.3 | 14.2 |
| Incr Delay (d2), s/veh | 21.0 | 0.6 | 43.7 | 0.2 | 5.9 | 6.6 | 13.2 | 2.8 | 0.9 | 8.4 | 1.4 | 1.0 |
| 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 | 8.6 | 5.4 | 11.0 | 5.8 | 13.9 | 13.4 | 7.7 | 17.8 | 3.5 | 7.0 | 15.0 | 4.8 |
| LnGrp Delay(d),s/veh | 81.5 | 55.1 | 79.5 | 49.9 | 57.4 | 58.2 | 73.6 | 39.1 | 9.6 | 69.2 | 36.6 | 15.2 |
| LnGrp LOS | F | E | F | D | E | E | E | D | A | E | D | B |
| Approach Vol, veh/h | | 752 | | | 1030 | | | 2068 | | | 1917 | |
| Approach Delay, s/veh | | 70.3 | | | 55.2 | | | 43.1 | | | 40.2 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 21.6 | 37.2 | 20.7 | 60.5 | 32.5 | 26.3 | 21.6 | 59.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 |
| Max Q Clear Time (g_c+I1), s | 16.9 | 29.3 | 15.7 | 39.0 | 14.0 | 19.0 | 16.6 | 33.3 |
| Green Ext Time (p_c), s | 0.2 | 3.4 | 0.5 | 1.3 | 0.7 | 2.8 | 0.5 | 5.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 47.9 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 209 | 394 | 0 | 0 | 391 | 206 | 336 | 2 | 0 | 87 | 0 | 82 |
| Future Volume (veh/h) | 209 | 394 | 0 | 0 | 391 | 206 | 336 | 2 | 0 | 87 | 0 | 82 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 227 | 428 | 0 | 0 | 425 | 224 | 365 | 2 | 0 | 95 | 0 | 89 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 335 | 713 | 0 | 0 | 711 | 332 | 0 | 597 | 0 | 122 | 0 | 0 |
| Arrive On Green | 0.10 | 0.38 | 0.00 | 0.00 | 0.21 | 0.21 | 0.00 | 0.32 | 0.00 | 0.07 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 95 | |
| Grp Volume(v), veh/h | 227 | 428 | 0 | 0 | 425 | 224 | 0 | 2 | 0 | 95 | 37.3 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | D | |
| Q Serve(g_s), s | 3.8 | 10.9 | 0.0 | 0.0 | 6.7 | 7.7 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Cycle Q Clear(g_c), s | 3.8 | 10.9 | 0.0 | 0.0 | 6.7 | 7.7 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 335 | 713 | 0 | 0 | 711 | 332 | 0 | 597 | 0 | 122 | | |
| V/C Ratio(X) | 0.68 | 0.60 | 0.00 | 0.00 | 0.60 | 0.67 | 0.00 | 0.00 | 0.00 | 0.78 | | |
| Avail Cap(c_a), veh/h | 435 | 943 | 0 | 0 | 1029 | 481 | 0 | 597 | 0 | 224 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 25.9 | 14.7 | 0.0 | 0.0 | 21.2 | 21.6 | 0.0 | 13.7 | 0.0 | 27.2 | | |
| Incr Delay (d2), s/veh | 2.8 | 0.8 | 0.0 | 0.0 | 0.8 | 2.4 | 0.0 | 0.0 | 0.0 | 10.1 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 1.9 | 5.7 | 0.0 | 0.0 | 3.2 | 3.6 | 0.0 | 0.0 | 0.0 | 1.9 | | |
| LnGrp Delay(d),s/veh | 28.6 | 15.5 | 0.0 | 0.0 | 22.0 | 24.0 | 0.0 | 13.7 | 0.0 | 37.3 | | |
| LnGrp LOS | C | B | | | C | C | | B | | D | | |
| Approach Vol, veh/h | | 655 | | | 649 | | | 2 | | | | |
| Approach Delay, s/veh | | 20.0 | | | 22.7 | | | 13.7 | | | | |
| Approach LOS | | C | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 23.5 | | 27.2 | 0.0 | | 10.3 | 16.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 19.0 | | 30.0 | 5.0 | | 7.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | 5.1 | 2.0 | | 12.9 | 0.0 | | 5.8 | 9.7 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 2.5 | 0.0 | | 0.1 | 2.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.4 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 17 | 30 | 7 | 12 | 81 | 60 | 2 | 73 | 1 | 12 | 59 | 12 |
| Future Vol, veh/h | 17 | 30 | 7 | 12 | 81 | 60 | 2 | 73 | 1 | 12 | 59 | 12 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 33 | 8 | 13 | 88 | 65 | 2 | 79 | 1 | 13 | 64 | 13 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.9 | 8.2 | 8.1 | 8.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 3% | 31% | 8% | 14% |
| Vol Thru, % | 96% | 56% | 53% | 71% |
| Vol Right, % | 1% | 13% | 39% | 14% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 76 | 54 | 153 | 83 |
| LT Vol | 2 | 17 | 12 | 12 |
| Through Vol | 73 | 30 | 81 | 59 |
| RT Vol | 1 | 7 | 60 | 12 |
| Lane Flow Rate | 83 | 59 | 166 | 90 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.104 | 0.073 | 0.193 | 0.112 |
| Departure Headway (Hd) | 4.532 | 4.498 | 4.184 | 4.469 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 792 | 798 | 860 | 804 |
| Service Time | 2.551 | 2.516 | 2.197 | 2.488 |
| HCM Lane V/C Ratio | 0.105 | 0.074 | 0.193 | 0.112 |
| HCM Control Delay | 8.1 | 7.9 | 8.2 | 8.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.2 | 0.7 | 0.4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 1 | 58 | 12 | 39 | 134 | 14 | 12 | 3 | 27 | 5 | 3 | 3 |
| Future Vol, veh/h | 1 | 58 | 12 | 39 | 134 | 14 | 12 | 3 | 27 | 5 | 3 | 3 |
| 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 | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 63 | 13 | 42 | 146 | 15 | 13 | 3 | 29 | 5 | 3 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 161 | 0 | 0 | 76 | 0 | 0 | 313 | 317 | 70 | 326 | 316 | 154 |
| Stage 1 | - | - | - | - | - | - | 72 | 72 | - | 238 | 238 | - |
| Stage 2 | - | - | - | - | - | - | 241 | 245 | - | 88 | 78 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1418 | - | - | 1523 | - | - | 640 | 599 | 993 | 627 | 600 | 892 |
| Stage 1 | - | - | - | - | - | - | 938 | 835 | - | 765 | 708 | - |
| Stage 2 | - | - | - | - | - | - | 762 | 703 | - | 920 | 830 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1418 | - | - | 1523 | - | - | 620 | 580 | 993 | 591 | 581 | 892 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 620 | 580 | - | 591 | 581 | - |
| Stage 1 | - | - | - | - | - | - | 937 | 834 | - | 764 | 687 | - |
| Stage 2 | - | - | - | - | - | - | 733 | 682 | - | 888 | 829 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 1.5 | 9.7 | 10.7 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 812 | 1418 | - | - | 1523 | - | - | 648 |
| HCM Lane V/C Ratio | 0.056 | 0.001 | - | - | 0.028 | - | - | 0.018 |
| HCM Control Delay (s) | 9.7 | 7.5 | 0 | - | 7.4 | 0 | - | 10.7 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0.1 | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 99 | 3 | 16 | 169 | 12 | 3 | 0 | 13 | 0 | 0 | 0 |
| Future Vol, veh/h | 4 | 99 | 3 | 16 | 169 | 12 | 3 | 0 | 13 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 108 | 3 | 17 | 184 | 13 | 3 | 0 | 14 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 197 | 0 | 0 | 111 | 0 | 0 | 343 | 349 | 110 |
| Stage 1 | - | - | - | - | - | - | 118 | 118 | - |
| Stage 2 | - | - | - | - | - | - | 225 | 231 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 6.42 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1376 | - | - | 1479 | - | - | 653 | 575 | 943 |
| Stage 1 | - | - | - | - | - | - | 907 | 798 | - |
| Stage 2 | - | - | - | - | - | - | 812 | 713 | - |
| Platoon blocked, % | | - | - | | - | - | | | |
| Mov Cap-1 Maneuver | 1376 | - | - | 1479 | - | - | 643 | 0 | 943 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 643 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 904 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 801 | 0 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.6 | 9.2 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 867 | 1376 | - | - | 1479 | - | - |
| HCM Lane V/C Ratio | 0.02 | 0.003 | - | - | 0.012 | - | - |
| HCM Control Delay (s) | 9.2 | 7.6 | 0 | - | 7.5 | 0 | - |
| HCM Lane LOS | A | A | A | - | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 57 | 72 | 98 | 1746 | 1711 | 112 |
| Future Volume (veh/h) | 57 | 72 | 98 | 1746 | 1711 | 112 |
| Number | 7 | 14 | 5 | 2 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 62 | 78 | 107 | 1898 | 1860 | 122 |
| Adj No. of Lanes | 1 | 1 | 1 | 3 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 150 | 133 | 137 | 3763 | 2805 | 184 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.74 | 0.58 | 0.58 |
| Sat Flow, veh/h | 1774 | 1583 | 1774 | 5253 | 5045 | 319 |
| Grp Volume(v), veh/h | 62 | 78 | 107 | 1898 | 1291 | 691 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1583 | 1774 | 1695 | 1695 | 1806 |
| Q Serve(g_s), s | 1.7 | 2.4 | 3.0 | 7.9 | 13.4 | 13.5 |
| Cycle Q Clear(g_c), s | 1.7 | 2.4 | 3.0 | 7.9 | 13.4 | 13.5 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.18 |
| Lane Grp Cap(c), veh/h | 150 | 133 | 137 | 3763 | 1950 | 1039 |
| V/C Ratio(X) | 0.41 | 0.58 | 0.78 | 0.50 | 0.66 | 0.66 |
| Avail Cap(c_a), veh/h | 627 | 560 | 191 | 3763 | 1950 | 1039 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 22.3 | 22.6 | 23.2 | 2.8 | 7.5 | 7.5 |
| Incr Delay (d2), s/veh | 1.8 | 4.0 | 13.1 | 0.5 | 1.8 | 3.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 2.3 | 2.0 | 3.7 | 6.6 | 7.5 |
| LnGrp Delay(d),s/veh | 24.1 | 26.6 | 36.3 | 3.2 | 9.3 | 10.8 |
| LnGrp LOS | C | C | D | A | A | B |
| Approach Vol, veh/h | 140 | | | 2005 | 1982 | |
| Approach Delay, s/veh | 25.5 | | | 5.0 | 9.8 | |
| Approach LOS | C | | | A | A | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | 5 | 6 | | |
| Phs Duration (G+Y+Rc), s | | 42.4 | | 8.8 | 8.4 | 34.0 | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | 4.5 | 4.5 | | |
| Max Green Setting (Gmax), s | | 37.9 | | 18.1 | 5.5 | 27.9 | | |
| Max Q Clear Time (g_c+I1), s | | 9.9 | | 4.4 | 5.0 | 15.5 | | |
| Green Ext Time (p_c), s | | 17.9 | | 0.3 | 0.0 | 9.8 | | |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 8.0 |
| HCM 2010 LOS | A |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 10 | 18 | 30 | 7 | 5 | 4 | 4 |
| Future Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 10 | 18 | 30 | 7 | 5 | 4 | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 25 | 4 | 16 | 26 | 11 | 20 | 33 | 8 | 5 | 4 | 4 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.2 | 7.3 | 7.4 | 7.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 33% | 10% | 31% | 38% |
| Vol Thru, % | 55% | 77% | 49% | 31% |
| Vol Right, % | 13% | 13% | 20% | 31% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 55 | 30 | 49 | 13 |
| LT Vol | 18 | 3 | 15 | 5 |
| Through Vol | 30 | 23 | 24 | 4 |
| RT Vol | 7 | 4 | 10 | 4 |
| Lane Flow Rate | 60 | 33 | 53 | 14 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.068 | 0.037 | 0.06 | 0.016 |
| Departure Headway (Hd) | 4.082 | 4.043 | 4.027 | 4.02 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 873 | 881 | 886 | 884 |
| Service Time | 2.126 | 2.09 | 2.069 | 2.074 |
| HCM Lane V/C Ratio | 0.069 | 0.037 | 0.06 | 0.016 |
| HCM Control Delay | 7.4 | 7.2 | 7.3 | 7.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.1 | 0.2 | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 102 | 109 | 1655 | 36 | 215 | 1540 |
| Future Volume (veh/h) | 102 | 109 | 1655 | 36 | 215 | 1540 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 111 | 118 | 1799 | 39 | 234 | 1674 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 126 | 134 | 3845 | 83 | 229 | 3817 |
| Arrive On Green | 0.16 | 0.16 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 806 | 857 | 5290 | 111 | 251 | 5253 |
| Grp Volume(v), veh/h | 230 | 0 | 1190 | 648 | 234 | 1674 |
| Grp Sat Flow(s),veh/h/ln | 1671 | 0 | 1695 | 1843 | 251 | 1695 |
| Q Serve(g_s), s | 13.1 | 0.0 | 13.1 | 13.1 | 59.9 | 11.9 |
| Cycle Q Clear(g_c), s | 13.1 | 0.0 | 13.1 | 13.1 | 73.0 | 11.9 |
| Prop In Lane | 0.48 | 0.51 | | 0.06 | 1.00 | |
| Lane Grp Cap(c), veh/h | 262 | 0 | 2545 | 1383 | 229 | 3817 |
| V/C Ratio(X) | 0.88 | 0.00 | 0.47 | 0.47 | 1.02 | 0.44 |
| Avail Cap(c_a), veh/h | 309 | 0 | 2545 | 1383 | 229 | 3817 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 4.7 | 4.7 | 28.4 | 4.5 |
| Incr Delay (d2), s/veh | 21.2 | 0.0 | 0.6 | 1.1 | 65.7 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.6 | 0.0 | 6.2 | 6.9 | 10.3 | 5.6 |
| LnGrp Delay(d),s/veh | 61.3 | 0.0 | 5.3 | 5.8 | 94.2 | 4.9 |
| LnGrp LOS | E | | A | A | F | A |
| Approach Vol, veh/h | 230 | | 1838 | | | 1908 |
| Approach Delay, s/veh | 61.3 | | 5.5 | | | 15.8 |
| Approach LOS | E | | A | | | B |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 77.5 | | | | 77.5 | | 19.8 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 73.0 | | | | 73.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 15.1 | | | | 75.0 | | 15.1 |
| Green Ext Time (p_c), s | | 23.2 | | | | 0.0 | | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 13.7 |
| HCM 2010 LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1435 | 40 | 111 | 1400 | 161 |
| Future Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1435 | 40 | 111 | 1400 | 161 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 108 | 53 | 114 | 117 | 54 | 65 | 153 | 1560 | 43 | 121 | 1522 | 175 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 146 | 72 | 191 | 154 | 71 | 197 | 189 | 2269 | 63 | 153 | 1968 | 226 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 | 0.45 | 0.45 | 0.09 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1209 | 593 | 1583 | 1232 | 569 | 1583 | 1774 | 5088 | 140 | 1774 | 4628 | 532 |
| Grp Volume(v), veh/h | 161 | 0 | 114 | 171 | 0 | 65 | 153 | 1039 | 564 | 121 | 1115 | 582 |
| Grp Sat Flow(s),veh/h/ln | 1802 | 0 | 1583 | 1801 | 0 | 1583 | 1774 | 1695 | 1838 | 1774 | 1695 | 1769 |
| Q Serve(g_s), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 19.8 | 19.8 | 5.4 | 22.8 | 22.8 |
| Cycle Q Clear(g_c), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 19.8 | 19.8 | 5.4 | 22.8 | 22.8 |
| Prop In Lane | 0.67 | | 1.00 | 0.68 | | 1.00 | 1.00 | | 0.08 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 218 | 0 | 191 | 225 | 0 | 197 | 189 | 1512 | 820 | 153 | 1442 | 752 |
| V/C Ratio(X) | 0.74 | 0.00 | 0.60 | 0.76 | 0.00 | 0.33 | 0.81 | 0.69 | 0.69 | 0.79 | 0.77 | 0.77 |
| Avail Cap(c_a), veh/h | 403 | 0 | 354 | 403 | 0 | 354 | 256 | 1512 | 820 | 213 | 1442 | 752 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 0.0 | 33.7 | 34.3 | 0.0 | 32.3 | 35.4 | 17.9 | 17.9 | 36.3 | 19.9 | 19.9 |
| Incr Delay (d2), s/veh | 4.8 | 0.0 | 2.9 | 5.3 | 0.0 | 1.0 | 12.8 | 2.6 | 4.7 | 12.7 | 4.1 | 7.6 |
| 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 | 3.8 | 0.0 | 2.6 | 4.0 | 0.0 | 1.4 | 4.0 | 9.8 | 11.1 | 3.2 | 11.3 | 12.6 |
| LnGrp Delay(d),s/veh | 39.2 | 0.0 | 36.7 | 39.5 | 0.0 | 33.3 | 48.2 | 20.5 | 22.6 | 49.0 | 24.0 | 27.5 |
| LnGrp LOS | D | | D | D | | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 275 | | | 236 | | | 1756 | | | 1818 | |
| Approach Delay, s/veh | | 38.1 | | | 37.8 | | | 23.6 | | | 26.8 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 11.5 | 40.6 | | 14.3 | 13.1 | 38.9 | | 14.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 9.7 | 36.1 | | 18.1 | 11.7 | 34.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 7.4 | 21.8 | | 9.0 | 8.8 | 24.8 | | 9.4 |
| Green Ext Time (p_c), s | 0.1 | 9.2 | | 0.8 | 0.1 | 6.9 | | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 26.8 |
| HCM 2010 LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 181 | 160 | 0 | 1069 | 1388 | 907 |
| Future Volume (vph) | 181 | 160 | 0 | 1069 | 1388 | 907 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.97 | 0.85 | | 1.00 | 0.94 | |
| Flt Protected | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3362 | 1441 | | 5085 | 4784 | |
| Flt Permitted | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3362 | 1441 | | 5085 | 4784 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 197 | 174 | 0 | 1162 | 1509 | 986 |
| RTOR Reduction (vph) | 25 | 63 | 0 | 0 | 73 | 0 |
| Lane Group Flow (vph) | 229 | 54 | 0 | 1162 | 2422 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 12.7 | 12.7 | | 88.8 | 88.8 | |
| Effective Green, g (s) | 12.7 | 12.7 | | 88.8 | 88.8 | |
| Actuated g/C Ratio | 0.11 | 0.11 | | 0.80 | 0.80 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 386 | 165 | | 4086 | 3844 | |
| v/s Ratio Prot | c0.07 | | | 0.23 | c0.51 | |
| v/s Ratio Perm | | 0.04 | | | | |
| v/c Ratio | 0.59 | 0.33 | | 0.28 | 0.63 | |
| Uniform Delay, d1 | 46.5 | 45.0 | | 2.8 | 4.3 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 2.4 | 1.2 | | 0.2 | 0.8 | |
| Delay (s) | 48.9 | 46.1 | | 2.9 | 5.1 | |
| Level of Service | D | D | | A | A | |
| Approach Delay (s) | 48.0 | | | 2.9 | 5.1 | |
| Approach LOS | D | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 8.4 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.63 | | |
| Actuated Cycle Length (s) | 110.5 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 61.5% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 958 | 290 | 140 | 427 | 0 | 0 | 0 | 0 | 393 | 199 | 162 |
| Future Volume (vph) | 0 | 958 | 290 | 140 | 427 | 0 | 0 | 0 | 0 | 393 | 199 | 162 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.99 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3111 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3111 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 1041 | 315 | 152 | 464 | 0 | 0 | 0 | 0 | 427 | 216 | 176 |
| RTOR Reduction (vph) | 0 | 0 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 98 |
| Lane Group Flow (vph) | 0 | 1041 | 110 | 152 | 464 | 0 | 0 | 0 | 0 | 218 | 440 | 60 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 28.3 | 28.3 | 8.4 | 41.2 | | | | | 30.8 | 30.8 | 30.8 |
| Effective Green, g (s) | | 28.3 | 28.3 | 8.4 | 41.2 | | | | | 30.8 | 30.8 | 30.8 |
| Actuated g/C Ratio | | 0.35 | 0.35 | 0.10 | 0.51 | | | | | 0.38 | 0.38 | 0.38 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1776 | 553 | 356 | 1800 | | | | | 612 | 1182 | 547 |
| v/s Ratio Prot | | c0.20 | | c0.04 | 0.13 | | | | | 0.14 | c0.14 | |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.04 |
| v/c Ratio | | 0.59 | 0.20 | 0.43 | 0.26 | | | | | 0.36 | 0.37 | 0.11 |
| Uniform Delay, d1 | | 21.6 | 18.4 | 34.0 | 11.3 | | | | | 18.0 | 18.1 | 16.2 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.2 | 0.8 | 0.1 | | | | | 0.4 | 0.2 | 0.4 |
| Delay (s) | | 22.1 | 18.6 | 34.9 | 11.3 | | | | | 18.4 | 18.3 | 16.6 |
| Level of Service | | C | B | C | B | | | | | B | B | B |
| Approach Delay (s) | | 21.3 | | | 17.1 | | | 0.0 | | | 18.0 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.4 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.47 | | |
| Actuated Cycle Length (s) | 81.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 57.7% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 328 | 980 | 0 | 0 | 442 | 262 | 119 | 198 | 561 | 0 | 0 | 0 |
| Future Volume (vph) | 328 | 980 | 0 | 0 | 442 | 262 | 119 | 198 | 561 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.93 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1572 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1572 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 357 | 1065 | 0 | 0 | 480 | 285 | 129 | 215 | 610 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 17 | 36 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 357 | 1065 | 0 | 0 | 480 | 55 | 116 | 418 | 367 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 13.2 | 34.4 | | | 16.7 | 16.7 | 43.7 | 43.7 | 43.7 | | | |
| Effective Green, g (s) | 13.2 | 34.4 | | | 16.7 | 16.7 | 43.7 | 43.7 | 43.7 | | | |
| Actuated g/C Ratio | 0.15 | 0.39 | | | 0.19 | 0.19 | 0.50 | 0.50 | 0.50 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 520 | 1397 | | | 678 | 303 | 843 | 788 | 754 | | | |
| v/s Ratio Prot | 0.10 | c0.30 | | | 0.14 | | 0.07 | c0.27 | | | | |
| v/s Ratio Perm | | | | | | 0.03 | | | 0.24 | | | |
| v/c Ratio | 0.69 | 0.76 | | | 0.71 | 0.18 | 0.14 | 0.53 | 0.49 | | | |
| Uniform Delay, d1 | 35.0 | 22.8 | | | 32.9 | 29.5 | 11.6 | 14.7 | 14.3 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 3.8 | 2.5 | | | 3.4 | 0.3 | 0.1 | 0.7 | 2.2 | | | |
| Delay (s) | 38.7 | 25.3 | | | 36.3 | 29.8 | 11.7 | 15.4 | 16.5 | | | |
| Level of Service | D | C | | | D | C | B | B | B | | | |
| Approach Delay (s) | | 28.7 | | | 33.9 | | | 15.4 | | | 0.0 | |
| Approach LOS | | C | | | C | | | B | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 25.9 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.67 | | |
| Actuated Cycle Length (s) | 87.1 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 57.7% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 94 | 464 | 50 | 13 | 321 | 101 | 38 | 196 | 10 | 103 | 117 | 136 |
| Future Volume (vph) | 94 | 464 | 50 | 13 | 321 | 101 | 38 | 196 | 10 | 103 | 117 | 136 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.99 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3488 | | 1770 | 3412 | | 1770 | 1849 | | 1770 | 1863 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3488 | | 1770 | 3412 | | 1770 | 1849 | | 1770 | 1863 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 102 | 504 | 54 | 14 | 349 | 110 | 41 | 213 | 11 | 112 | 127 | 148 |
| RTOR Reduction (vph) | 0 | 7 | 0 | 0 | 29 | 0 | 0 | 2 | 0 | 0 | 0 | 122 |
| Lane Group Flow (vph) | 102 | 551 | 0 | 14 | 430 | 0 | 41 | 222 | 0 | 112 | 127 | 26 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | 11.5 | 44.0 | | 2.1 | 34.6 | | 10.3 | 15.9 | | 10.0 | 15.6 | 15.6 |
| Effective Green, g (s) | 11.5 | 44.0 | | 2.1 | 34.6 | | 10.3 | 15.9 | | 10.0 | 15.6 | 15.6 |
| Actuated g/C Ratio | 0.13 | 0.49 | | 0.02 | 0.38 | | 0.11 | 0.18 | | 0.11 | 0.17 | 0.17 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 226 | 1705 | | 41 | 1311 | | 202 | 326 | | 196 | 322 | 274 |
| v/s Ratio Prot | c0.06 | c0.16 | | 0.01 | 0.13 | | 0.02 | c0.12 | | c0.06 | 0.07 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.02 |
| v/c Ratio | 0.45 | 0.32 | | 0.34 | 0.33 | | 0.20 | 0.68 | | 0.57 | 0.39 | 0.09 |
| Uniform Delay, d1 | 36.3 | 14.0 | | 43.3 | 19.5 | | 36.1 | 34.7 | | 38.0 | 33.0 | 31.3 |
| Progression Factor | 1.00 | 1.00 | | 0.77 | 0.61 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.4 | 0.5 | | 4.8 | 0.7 | | 0.5 | 5.5 | | 4.0 | 0.8 | 0.1 |
| Delay (s) | 37.8 | 14.5 | | 38.3 | 12.5 | | 36.6 | 40.2 | | 41.9 | 33.8 | 31.4 |
| Level of Service | D | B | | D | B | | D | D | | D | C | C |
| Approach Delay (s) | | 18.1 | | | 13.3 | | | 39.7 | | | 35.2 | |
| Approach LOS | | B | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 23.7 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.47 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 50.2% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 146 | 422 | 13 | 69 | 329 | 115 | 11 | 118 | 168 | 62 | 34 | 101 |
| Future Volume (vph) | 146 | 422 | 13 | 69 | 329 | 115 | 11 | 118 | 168 | 62 | 34 | 101 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.96 | | | 1.00 | 0.85 | 1.00 | 0.89 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3524 | | 1770 | 3402 | | | 1855 | 1583 | 1770 | 1654 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.97 | 1.00 | 0.56 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3524 | | 1770 | 3402 | | | 1799 | 1583 | 1039 | 1654 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 159 | 459 | 14 | 75 | 358 | 125 | 12 | 128 | 183 | 67 | 37 | 110 |
| RTOR Reduction (vph) | 0 | 2 | 0 | 0 | 27 | 0 | 0 | 0 | 158 | 0 | 95 | 0 |
| Lane Group Flow (vph) | 159 | 471 | 0 | 75 | 456 | 0 | 0 | 140 | 25 | 67 | 52 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 15.4 | 56.1 | | 8.0 | 48.7 | | | 12.4 | 12.4 | 12.4 | 12.4 | |
| Effective Green, g (s) | 15.4 | 56.1 | | 8.0 | 48.7 | | | 12.4 | 12.4 | 12.4 | 12.4 | |
| Actuated g/C Ratio | 0.17 | 0.62 | | 0.09 | 0.54 | | | 0.14 | 0.14 | 0.14 | 0.14 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 302 | 2196 | | 157 | 1840 | | | 247 | 218 | 143 | 227 | |
| v/s Ratio Prot | c0.09 | 0.13 | | 0.04 | c0.13 | | | | | | 0.03 | |
| v/s Ratio Perm | | | | | | | | c0.08 | 0.02 | 0.06 | | |
| v/c Ratio | 0.53 | 0.21 | | 0.48 | 0.25 | | | 0.57 | 0.12 | 0.47 | 0.23 | |
| Uniform Delay, d1 | 34.0 | 7.4 | | 39.0 | 10.9 | | | 36.3 | 34.0 | 35.8 | 34.5 | |
| Progression Factor | 1.26 | 0.34 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 1.6 | 0.2 | | 2.3 | 0.3 | | | 3.0 | 0.2 | 2.4 | 0.5 | |
| Delay (s) | 44.6 | 2.7 | | 41.3 | 11.3 | | | 39.3 | 34.2 | 38.2 | 35.1 | |
| Level of Service | D | A | | D | B | | | D | C | D | D | |
| Approach Delay (s) | | 13.3 | | | 15.3 | | | 36.4 | | | 36.0 | |
| Approach LOS | | B | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 21.1 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.35 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 47.4% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 442 | 426 | 112 | 384 | 0 | 0 | 0 | 0 | 322 | 0 | 178 |
| Future Volume (vph) | 0 | 442 | 426 | 112 | 384 | 0 | 0 | 0 | 0 | 322 | 0 | 178 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.93 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3279 | | 1610 | 3385 | | | | | 1681 | 1681 | 1583 |
| Flt Permitted | | 1.00 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3279 | | 1610 | 3193 | | | | | 1681 | 1681 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 480 | 463 | 122 | 417 | 0 | 0 | 0 | 0 | 350 | 0 | 193 |
| RTOR Reduction (vph) | 0 | 245 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 124 |
| Lane Group Flow (vph) | 0 | 698 | 0 | 110 | 429 | 0 | 0 | 0 | 0 | 175 | 175 | 69 |
| Turn Type | | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 20.6 | | 7.8 | 32.9 | | | | | 23.4 | 23.4 | 23.4 |
| Effective Green, g (s) | | 20.6 | | 7.8 | 32.9 | | | | | 23.4 | 23.4 | 23.4 |
| Actuated g/C Ratio | | 0.32 | | 0.12 | 0.50 | | | | | 0.36 | 0.36 | 0.36 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1034 | | 192 | 1631 | | | | | 602 | 602 | 567 |
| v/s Ratio Prot | | c0.21 | | c0.07 | 0.03 | | | | | c0.10 | 0.10 | |
| v/s Ratio Perm | | | | | 0.10 | | | | | | | 0.04 |
| v/c Ratio | | 0.67 | | 0.57 | 0.26 | | | | | 0.29 | 0.29 | 0.12 |
| Uniform Delay, d1 | | 19.4 | | 27.2 | 9.3 | | | | | 15.0 | 15.0 | 14.1 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 1.8 | | 4.1 | 0.1 | | | | | 0.3 | 0.3 | 0.4 |
| Delay (s) | | 21.2 | | 31.3 | 9.4 | | | | | 15.3 | 15.3 | 14.5 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 21.2 | | | 13.8 | | | 0.0 | | | 15.0 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 17.6 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.49 | | |
| Actuated Cycle Length (s) | 65.3 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.7% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 266 | 396 | 269 | 139 | 82 | 29 | 169 | 921 | 370 | 55 | 1361 | 216 |
| Future Volume (veh/h) | 266 | 396 | 269 | 139 | 82 | 29 | 169 | 921 | 370 | 55 | 1361 | 216 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 289 | 430 | 292 | 151 | 89 | 32 | 184 | 1001 | 402 | 60 | 1479 | 235 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 761 | 783 | 350 | 242 | 249 | 111 | 252 | 2521 | 785 | 136 | 2350 | 732 |
| Arrive On Green | 0.22 | 0.22 | 0.22 | 0.07 | 0.07 | 0.07 | 0.07 | 0.50 | 0.50 | 0.04 | 0.46 | 0.46 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 289 | 430 | 292 | 151 | 89 | 32 | 184 | 1001 | 402 | 60 | 1479 | 235 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 7.4 | 11.2 | 18.3 | 4.4 | 2.5 | 2.0 | 5.4 | 12.8 | 17.8 | 1.8 | 22.9 | 9.7 |
| Cycle Q Clear(g_c), s | 7.4 | 11.2 | 18.3 | 4.4 | 2.5 | 2.0 | 5.4 | 12.8 | 17.8 | 1.8 | 22.9 | 9.7 |
| 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 | 761 | 783 | 350 | 242 | 249 | 111 | 252 | 2521 | 785 | 136 | 2350 | 732 |
| V/C Ratio(X) | 0.38 | 0.55 | 0.83 | 0.62 | 0.36 | 0.29 | 0.73 | 0.40 | 0.51 | 0.44 | 0.63 | 0.32 |
| Avail Cap(c_a), veh/h | 878 | 903 | 404 | 613 | 630 | 282 | 381 | 2521 | 785 | 182 | 2350 | 732 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 35.9 | 38.6 | 47.0 | 46.1 | 45.8 | 47.1 | 16.4 | 17.7 | 48.8 | 21.2 | 17.6 |
| Incr Delay (d2), s/veh | 0.3 | 0.6 | 12.5 | 2.6 | 0.9 | 1.4 | 4.0 | 0.5 | 2.4 | 2.2 | 1.3 | 1.2 |
| 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 | 3.6 | 5.6 | 9.2 | 2.2 | 1.3 | 0.9 | 2.7 | 6.0 | 8.2 | 0.9 | 11.0 | 4.5 |
| LnGrp Delay(d),s/veh | 34.7 | 36.5 | 51.2 | 49.6 | 46.9 | 47.2 | 51.2 | 16.9 | 20.1 | 51.0 | 22.5 | 18.8 |
| LnGrp LOS | C | D | D | D | D | D | D | B | C | D | C | B |
| Approach Vol, veh/h | | 1011 | | | 272 | | | 1587 | | | 1774 | |
| Approach Delay, s/veh | | 40.2 | | | 48.4 | | | 21.7 | | | 23.0 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 56.0 | | 27.5 | 12.1 | 52.5 | | 11.8 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.5 | 51.5 | | 26.5 | 11.5 | 45.5 | | 18.5 |
| Max Q Clear Time (g_c+I1), s | 3.8 | 19.8 | | 20.3 | 7.4 | 24.9 | | 6.4 |
| Green Ext Time (p_c), s | 0.0 | 10.6 | | 2.7 | 0.2 | 12.1 | | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 27.8 |
| HCM 2010 LOS | C |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 547 | 766 | 936 | 287 | 0 | 1747 |
| Future Volume (veh/h) | 547 | 766 | 936 | 287 | 0 | 1747 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 595 | 833 | 1017 | 312 | 0 | 1899 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1192 | 965 | 2210 | 678 | 0 | 2911 |
| Arrive On Green | 0.35 | 0.35 | 0.57 | 0.57 | 0.00 | 0.57 |
| Sat Flow, veh/h | 3442 | 2787 | 4028 | 1183 | 0 | 5421 |
| Grp Volume(v), veh/h | 595 | 833 | 893 | 436 | 0 | 1899 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1654 | 0 | 1695 |
| Q Serve(g_s), s | 15.2 | 30.9 | 17.0 | 17.0 | 0.0 | 28.3 |
| Cycle Q Clear(g_c), s | 15.2 | 30.9 | 17.0 | 17.0 | 0.0 | 28.3 |
| Prop In Lane | 1.00 | 1.00 | | 0.72 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1192 | 965 | 1941 | 947 | 0 | 2911 |
| V/C Ratio(X) | 0.50 | 0.86 | 0.46 | 0.46 | 0.00 | 0.65 |
| Avail Cap(c_a), veh/h | 1474 | 1193 | 1941 | 947 | 0 | 2911 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.6 | 33.8 | 13.8 | 13.8 | 0.0 | 16.2 |
| Incr Delay (d2), s/veh | 0.3 | 5.7 | 0.8 | 1.6 | 0.0 | 1.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.2 | 12.6 | 8.1 | 8.2 | 0.0 | 13.5 |
| LnGrp Delay(d),s/veh | 29.0 | 39.5 | 14.5 | 15.4 | 0.0 | 17.3 |
| LnGrp LOS | C | D | B | B | | B |
| Approach Vol, veh/h | 1428 | | 1329 | | | 1899 |
| Approach Delay, s/veh | 35.1 | | 14.8 | | | 17.3 |
| Approach LOS | D | | B | | | B |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 68.0 | | | | 68.0 | | 42.9 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.5 | | | | 63.5 | | 47.5 |
| Max Q Clear Time (g_c+I1), s | | 19.0 | | | | 30.3 | | 32.9 |
| Green Ext Time (p_c), s | | 13.0 | | | | 20.0 | | 5.5 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.1 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 431 | 970 | 73 | 28 | 488 | 112 | 153 | 100 | 45 | 131 | 64 | 78 |
| Future Volume (veh/h) | 431 | 970 | 73 | 28 | 488 | 112 | 153 | 100 | 45 | 131 | 64 | 78 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 468 | 1054 | 79 | 30 | 530 | 122 | 166 | 109 | 49 | 142 | 70 | 85 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 516 | 1621 | 121 | 53 | 642 | 147 | 264 | 401 | 180 | 312 | 141 | 521 |
| Arrive On Green | 0.29 | 0.49 | 0.49 | 0.03 | 0.22 | 0.22 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 3338 | 250 | 1774 | 2861 | 656 | 1227 | 1218 | 548 | 739 | 429 | 1583 |
| Grp Volume(v), veh/h | 468 | 559 | 574 | 30 | 327 | 325 | 166 | 0 | 158 | 212 | 0 | 85 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1819 | 1774 | 1770 | 1747 | 1227 | 0 | 1766 | 1168 | 0 | 1583 |
| Q Serve(g_s), s | 22.0 | 20.6 | 20.6 | 1.4 | 15.2 | 15.4 | 11.6 | 0.0 | 5.7 | 10.0 | 0.0 | 3.3 |
| Cycle Q Clear(g_c), s | 22.0 | 20.6 | 20.6 | 1.4 | 15.2 | 15.4 | 27.3 | 0.0 | 5.7 | 15.7 | 0.0 | 3.3 |
| Prop In Lane | 1.00 | | 0.14 | 1.00 | | 0.38 | 1.00 | | 0.31 | 0.67 | | 1.00 |
| Lane Grp Cap(c), veh/h | 516 | 859 | 883 | 53 | 397 | 392 | 264 | 0 | 581 | 453 | 0 | 521 |
| V/C Ratio(X) | 0.91 | 0.65 | 0.65 | 0.57 | 0.82 | 0.83 | 0.63 | 0.00 | 0.27 | 0.47 | 0.00 | 0.16 |
| Avail Cap(c_a), veh/h | 706 | 1064 | 1093 | 121 | 480 | 474 | 264 | 0 | 581 | 453 | 0 | 521 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.6 | 16.7 | 16.8 | 41.5 | 32.0 | 32.0 | 36.4 | 0.0 | 21.4 | 26.2 | 0.0 | 20.6 |
| Incr Delay (d2), s/veh | 12.4 | 1.0 | 1.0 | 9.3 | 9.4 | 10.0 | 10.9 | 0.0 | 1.2 | 3.4 | 0.0 | 0.7 |
| 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 | 12.6 | 10.2 | 10.4 | 0.8 | 8.5 | 8.5 | 4.7 | 0.0 | 3.0 | 4.7 | 0.0 | 1.5 |
| LnGrp Delay(d),s/veh | 42.0 | 17.7 | 17.7 | 50.8 | 41.4 | 42.0 | 47.3 | 0.0 | 22.6 | 29.6 | 0.0 | 21.3 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | C |
| Approach Vol, veh/h | | 1601 | | | 682 | | | 324 | | | 297 | |
| Approach Delay, s/veh | | 24.8 | | | 42.1 | | | 35.3 | | | 27.3 | |
| Approach LOS | | C | | | D | | | D | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 33.0 | 7.1 | 46.6 | | 33.0 | 29.7 | 24.0 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 28.5 | 5.9 | 52.1 | | 28.5 | 34.5 | 23.5 |
| Max Q Clear Time (g_c+I1), s | | 29.3 | 3.4 | 22.6 | | 17.7 | 24.0 | 17.4 |
| Green Ext Time (p_c), s | | 0.0 | 0.0 | 9.1 | | 1.1 | 1.2 | 2.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 30.3 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 60 | 861 | 50 | 22 | 579 | 22 | 63 | 25 | 69 | 16 | 2 | 13 |
| Future Volume (veh/h) | 60 | 861 | 50 | 22 | 579 | 22 | 63 | 25 | 69 | 16 | 2 | 13 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 65 | 936 | 54 | 24 | 629 | 24 | 68 | 27 | 75 | 17 | 2 | 14 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 84 | 1107 | 64 | 45 | 1056 | 40 | 159 | 63 | 175 | 369 | 387 | 329 |
| Arrive On Green | 0.05 | 0.33 | 0.33 | 0.03 | 0.30 | 0.30 | 0.23 | 0.23 | 0.23 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3401 | 196 | 1774 | 3476 | 133 | 679 | 269 | 749 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 65 | 487 | 503 | 24 | 320 | 333 | 170 | 0 | 0 | 17 | 2 | 14 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1828 | 1774 | 1770 | 1839 | 1697 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 3.2 | 22.3 | 22.3 | 1.2 | 13.4 | 13.4 | 7.4 | 0.0 | 0.0 | 0.7 | 0.1 | 0.6 |
| Cycle Q Clear(g_c), s | 3.2 | 22.3 | 22.3 | 1.2 | 13.4 | 13.4 | 7.4 | 0.0 | 0.0 | 0.7 | 0.1 | 0.6 |
| Prop In Lane | 1.00 | | 0.11 | 1.00 | | 0.07 | 0.40 | | 0.44 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 84 | 576 | 595 | 45 | 537 | 558 | 398 | 0 | 0 | 369 | 387 | 329 |
| V/C Ratio(X) | 0.78 | 0.85 | 0.85 | 0.53 | 0.60 | 0.60 | 0.43 | 0.00 | 0.00 | 0.05 | 0.01 | 0.04 |
| Avail Cap(c_a), veh/h | 185 | 667 | 689 | 116 | 598 | 621 | 398 | 0 | 0 | 369 | 387 | 329 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 41.0 | 27.3 | 27.3 | 41.9 | 25.8 | 25.8 | 28.3 | 0.0 | 0.0 | 27.6 | 27.3 | 27.5 |
| Incr Delay (d2), s/veh | 14.1 | 8.7 | 8.5 | 9.5 | 1.3 | 1.3 | 3.3 | 0.0 | 0.0 | 0.2 | 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 | 1.9 | 12.2 | 12.6 | 0.7 | 6.7 | 7.0 | 3.9 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 |
| LnGrp Delay(d),s/veh | 55.1 | 36.1 | 35.8 | 51.4 | 27.1 | 27.1 | 31.7 | 0.0 | 0.0 | 27.8 | 27.4 | 27.8 |
| LnGrp LOS | E | D | D | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 1055 | | | 677 | | | 170 | | | 33 | |
| Approach Delay, s/veh | | 37.1 | | | 27.9 | | | 31.7 | | | 27.8 | |
| Approach LOS | | D | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 24.9 | 6.7 | 32.8 | | 22.6 | 8.6 | 30.9 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 20.4 | 5.7 | 32.8 | | 18.1 | 9.1 | 29.4 |
| Max Q Clear Time (g_c+I1), s | | 9.4 | 3.2 | 24.3 | | 2.7 | 5.2 | 15.4 |
| Green Ext Time (p_c), s | | 0.6 | 0.0 | 4.1 | | 0.0 | 0.0 | 3.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.3 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 207 | 455 | 231 | 223 | 260 | 130 | 209 | 1101 | 118 | 213 | 773 | 98 |
| Future Volume (veh/h) | 207 | 455 | 231 | 223 | 260 | 130 | 209 | 1101 | 118 | 213 | 773 | 98 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 225 | 495 | 251 | 242 | 283 | 141 | 227 | 1197 | 128 | 232 | 840 | 107 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 253 | 659 | 295 | 395 | 366 | 177 | 282 | 2369 | 737 | 287 | 2375 | 740 |
| Arrive On Green | 0.14 | 0.19 | 0.19 | 0.11 | 0.16 | 0.16 | 0.08 | 0.47 | 0.47 | 0.08 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2312 | 1122 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 225 | 495 | 251 | 242 | 215 | 209 | 227 | 1197 | 128 | 232 | 840 | 107 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1665 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 14.9 | 15.9 | 14.9 | 8.0 | 14.0 | 14.5 | 7.8 | 19.7 | 3.6 | 8.0 | 12.7 | 2.7 |
| Cycle Q Clear(g_c), s | 14.9 | 15.9 | 14.9 | 8.0 | 14.0 | 14.5 | 7.8 | 19.7 | 3.6 | 8.0 | 12.7 | 2.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.67 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 253 | 659 | 295 | 395 | 280 | 263 | 282 | 2369 | 737 | 287 | 2375 | 740 |
| V/C Ratio(X) | 0.89 | 0.75 | 0.85 | 0.61 | 0.77 | 0.79 | 0.80 | 0.51 | 0.17 | 0.81 | 0.35 | 0.14 |
| Avail Cap(c_a), veh/h | 303 | 1304 | 583 | 395 | 524 | 492 | 301 | 2369 | 737 | 301 | 2375 | 740 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.53 | 0.53 | 0.53 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 0.73 | 0.73 | 0.73 |
| Uniform Delay (d), s/veh | 50.5 | 46.2 | 30.8 | 50.6 | 48.4 | 48.6 | 54.1 | 22.4 | 7.7 | 54.1 | 20.4 | 6.4 |
| Incr Delay (d2), s/veh | 13.9 | 0.9 | 3.8 | 2.7 | 4.3 | 5.2 | 13.9 | 0.8 | 0.5 | 11.1 | 0.3 | 0.3 |
| 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 | 8.3 | 7.9 | 7.0 | 4.0 | 7.1 | 7.1 | 4.2 | 9.4 | 2.3 | 4.2 | 6.0 | 1.9 |
| LnGrp Delay(d),s/veh | 64.4 | 47.1 | 34.6 | 53.2 | 52.7 | 53.9 | 68.1 | 23.2 | 8.3 | 65.2 | 20.7 | 6.7 |
| LnGrp LOS | E | D | C | D | D | D | E | C | A | E | C | A |
| Approach Vol, veh/h | | 971 | | | 666 | | | 1552 | | | 1179 | |
| Approach Delay, s/veh | | 47.9 | | | 53.2 | | | 28.5 | | | 28.2 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 21.6 | 23.5 | 14.5 | 60.4 | 18.3 | 26.8 | 14.3 | 60.5 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 35.5 | 10.5 | 35.5 | 11.8 | 44.2 | 10.5 | 35.5 |
| Max Q Clear Time (g_c+I1), s | 16.9 | 16.5 | 10.0 | 21.7 | 10.0 | 17.9 | 9.8 | 14.7 |
| Green Ext Time (p_c), s | 0.2 | 2.5 | 0.0 | 7.4 | 0.1 | 4.5 | 0.1 | 6.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 36.5 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 274 | 502 | 0 | 0 | 153 | 146 | 297 | 4 | 0 | 50 | 0 | 46 |
| Future Volume (veh/h) | 274 | 502 | 0 | 0 | 153 | 146 | 297 | 4 | 0 | 50 | 0 | 46 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 298 | 546 | 0 | 0 | 166 | 159 | 323 | 4 | 0 | 54 | 0 | 50 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 435 | 674 | 0 | 0 | 534 | 249 | 0 | 661 | 0 | 89 | 0 | 0 |
| Arrive On Green | 0.13 | 0.36 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.35 | 0.00 | 0.05 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 54 | |
| Grp Volume(v), veh/h | 298 | 546 | 0 | 0 | 166 | 159 | 0 | 4 | 0 | 54 | 33.4 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | C | |
| Q Serve(g_s), s | 4.8 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Cycle Q Clear(g_c), s | 4.8 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 435 | 674 | 0 | 0 | 534 | 249 | 0 | 661 | 0 | 89 | | |
| V/C Ratio(X) | 0.69 | 0.81 | 0.00 | 0.00 | 0.31 | 0.64 | 0.00 | 0.01 | 0.00 | 0.61 | | |
| Avail Cap(c_a), veh/h | 804 | 1241 | 0 | 0 | 1202 | 561 | 0 | 661 | 0 | 230 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 24.2 | 16.7 | 0.0 | 0.0 | 21.6 | 22.8 | 0.0 | 12.1 | 0.0 | 26.9 | | |
| Incr Delay (d2), s/veh | 1.9 | 2.4 | 0.0 | 0.0 | 0.3 | 2.7 | 0.0 | 0.0 | 0.0 | 6.5 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 2.4 | 8.2 | 0.0 | 0.0 | 1.2 | 2.6 | 0.0 | 0.0 | 0.0 | 1.0 | | |
| LnGrp Delay(d),s/veh | 26.1 | 19.1 | 0.0 | 0.0 | 21.9 | 25.5 | 0.0 | 12.1 | 0.0 | 33.4 | | |
| LnGrp LOS | C | B | | | C | C | | B | | C | | |
| Approach Vol, veh/h | | 844 | | | 325 | | | 4 | | | | |
| Approach Delay, s/veh | | 21.5 | | | 23.7 | | | 12.1 | | | | |
| Approach LOS | | C | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 7.4 | 25.0 | | 25.4 | 0.0 | | 11.8 | 13.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 20.5 | | 38.5 | 5.0 | | 13.5 | 20.5 |
| Max Q Clear Time (g_c+I1), s | 3.7 | 2.1 | | 17.3 | 0.0 | | 6.8 | 7.4 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 3.6 | 0.0 | | 0.6 | 1.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.6 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.2 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 33 | 65 | 12 | 21 | 45 | 21 | 5 | 98 | 4 | 14 | 45 | 6 |
| Future Vol, veh/h | 33 | 65 | 12 | 21 | 45 | 21 | 5 | 98 | 4 | 14 | 45 | 6 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 36 | 71 | 13 | 23 | 49 | 23 | 5 | 107 | 4 | 15 | 49 | 7 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.3 | 8 | 8.3 | 8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 30% | 24% | 22% |
| Vol Thru, % | 92% | 59% | 52% | 69% |
| Vol Right, % | 4% | 11% | 24% | 9% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 107 | 110 | 87 | 65 |
| LT Vol | 5 | 33 | 21 | 14 |
| Through Vol | 98 | 65 | 45 | 45 |
| RT Vol | 4 | 12 | 21 | 6 |
| Lane Flow Rate | 116 | 120 | 95 | 71 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.145 | 0.148 | 0.116 | 0.089 |
| Departure Headway (Hd) | 4.494 | 4.469 | 4.407 | 4.547 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 800 | 803 | 814 | 789 |
| Service Time | 2.512 | 2.488 | 2.427 | 2.567 |
| HCM Lane V/C Ratio | 0.145 | 0.149 | 0.117 | 0.09 |
| HCM Control Delay | 8.3 | 8.3 | 8 | 8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.5 | 0.5 | 0.4 | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 53 | 13 | 15 | 72 | 2 | 11 | 4 | 52 | 0 | 6 | 1 |
| Future Vol, veh/h | 0 | 53 | 13 | 15 | 72 | 2 | 11 | 4 | 52 | 0 | 6 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 58 | 14 | 16 | 78 | 2 | 12 | 4 | 57 | 0 | 7 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 80 | 0 | 0 | 72 | 0 | 0 | 180 | 177 | 65 | 207 | 183 | 79 |
| Stage 1 | - | - | - | - | - | - | 65 | 65 | - | 111 | 111 | - |
| Stage 2 | - | - | - | - | - | - | 115 | 112 | - | 96 | 72 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1518 | - | - | 1528 | - | - | 782 | 717 | 999 | 751 | 711 | 981 |
| Stage 1 | - | - | - | - | - | - | 946 | 841 | - | 894 | 804 | - |
| Stage 2 | - | - | - | - | - | - | 890 | 803 | - | 911 | 835 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1518 | - | - | 1528 | - | - | 769 | 709 | 999 | 699 | 703 | 981 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 769 | 709 | - | 699 | 703 | - |
| Stage 1 | - | - | - | - | - | - | 946 | 841 | - | 894 | 795 | - |
| Stage 2 | - | - | - | - | - | - | 872 | 794 | - | 855 | 835 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 1.2 | 9.2 | 10 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 931 | 1518 | - | - | 1528 | - | - | 733 |
| HCM Lane V/C Ratio | 0.078 | - | - | - | 0.011 | - | - | 0.01 |
| HCM Control Delay (s) | 9.2 | 0 | - | - | 7.4 | 0 | - | 10 |
| HCM Lane LOS | A | A | - | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.3 | 0 | - | - | 0 | - | - | 0 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 111 | 0 | 1 | 90 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Future Vol, veh/h | 0 | 111 | 0 | 1 | 90 | 1 | 0 | 0 | 0 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 121 | 0 | 1 | 98 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 99 | 0 | 0 | 121 | 0 | 0 | 222 | 222 | 121 | 222 | 222 | 99 |
| Stage 1 | - | - | - | - | - | - | 121 | 121 | - | 101 | 101 | - |
| Stage 2 | - | - | - | - | - | - | 101 | 101 | - | 121 | 121 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1494 | - | - | 1467 | - | - | 734 | 677 | 930 | 734 | 677 | 957 |
| Stage 1 | - | - | - | - | - | - | 883 | 796 | - | 905 | 811 | - |
| Stage 2 | - | - | - | - | - | - | 905 | 811 | - | 883 | 796 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1494 | - | - | 1467 | - | - | 733 | 676 | 930 | 733 | 676 | 957 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 733 | 676 | - | 733 | 676 | - |
| Stage 1 | - | - | - | - | - | - | 883 | 796 | - | 905 | 810 | - |
| Stage 2 | - | - | - | - | - | - | 904 | 810 | - | 883 | 796 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 0.1 | 0 | 0 |
| HCM LOS | | | A | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1494 | - | - | 1467 | - | - | - |
| HCM Lane V/C Ratio | - | - | - | - | 0.001 | - | - | - |
| HCM Control Delay (s) | 0 | 0 | - | - | 7.5 | 0 | - | 0 |
| HCM Lane LOS | A | A | - | - | A | A | - | A |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 61 | 66 | 1445 | 1289 | 25 |
| Future Vol, veh/h | 20 | 61 | 66 | 1445 | 1289 | 25 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 250 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 66 | 72 | 1571 | 1401 | 27 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 2187 | 714 | 1428 | 0 | - | 0 |
| Stage 1 | 1415 | - | - | - | - | - |
| Stage 2 | 772 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | 5.34 | - | - | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | 3.12 | - | - | - |
| Pot Cap-1 Maneuver | 74 | 321 | 242 | - | - | - |
| Stage 1 | 134 | - | - | - | - | - |
| Stage 2 | 378 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 52 | 321 | 242 | - | - | - |
| Mov Cap-2 Maneuver | 52 | - | - | - | - | - |
| Stage 1 | 94 | - | - | - | - | - |
| Stage 2 | 378 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 65.7 | 1.1 | 0 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 242 | - | 141 | - | - |
| HCM Lane V/C Ratio | 0.296 | - | 0.624 | - | - |
| HCM Control Delay (s) | 26 | - | 65.7 | - | - |
| HCM Lane LOS | D | - | F | - | - |
| HCM 95th %tile Q(veh) | 1.2 | - | 3.3 | - | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 17 | 16 | 22 | 24 | 8 | 18 | 7 |
| Future Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 17 | 16 | 22 | 24 | 8 | 18 | 7 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 71 | 34 | 24 | 36 | 18 | 17 | 24 | 26 | 9 | 20 | 8 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8 | 7.7 | 7.7 | 7.6 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 26% | 29% | 31% | 24% |
| Vol Thru, % | 35% | 48% | 46% | 55% |
| Vol Right, % | 39% | 23% | 24% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 62 | 135 | 72 | 33 |
| LT Vol | 16 | 39 | 22 | 8 |
| Through Vol | 22 | 65 | 33 | 18 |
| RT Vol | 24 | 31 | 17 | 7 |
| Lane Flow Rate | 67 | 147 | 78 | 36 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.08 | 0.167 | 0.09 | 0.044 |
| Departure Headway (Hd) | 4.287 | 4.094 | 4.146 | 4.423 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 840 | 864 | 850 | 814 |
| Service Time | 2.288 | 2.175 | 2.242 | 2.425 |
| HCM Lane V/C Ratio | 0.08 | 0.17 | 0.092 | 0.044 |
| HCM Control Delay | 7.7 | 8 | 7.7 | 7.6 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.6 | 0.3 | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 109 | 81 | 1405 | 37 | 119 | 1149 |
| Future Volume (veh/h) | 109 | 81 | 1405 | 37 | 119 | 1149 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 118 | 88 | 1527 | 40 | 129 | 1249 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 140 | 104 | 3810 | 100 | 294 | 3802 |
| Arrive On Green | 0.15 | 0.15 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 962 | 718 | 5264 | 133 | 327 | 5253 |
| Grp Volume(v), veh/h | 207 | 0 | 1016 | 551 | 129 | 1249 |
| Grp Sat Flow(s),veh/h/ln | 1688 | 0 | 1695 | 1839 | 327 | 1695 |
| Q Serve(g_s), s | 10.1 | 0.0 | 9.1 | 9.1 | 19.8 | 6.9 |
| Cycle Q Clear(g_c), s | 10.1 | 0.0 | 9.1 | 9.1 | 28.9 | 6.9 |
| Prop In Lane | 0.57 | 0.43 | | 0.07 | 1.00 | |
| Lane Grp Cap(c), veh/h | 246 | 0 | 2535 | 1375 | 294 | 3802 |
| V/C Ratio(X) | 0.84 | 0.00 | 0.40 | 0.40 | 0.44 | 0.33 |
| Avail Cap(c_a), veh/h | 361 | 0 | 2535 | 1375 | 294 | 3802 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.1 | 0.0 | 3.8 | 3.8 | 9.0 | 3.6 |
| Incr Delay (d2), s/veh | 11.2 | 0.0 | 0.5 | 0.9 | 4.7 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.4 | 0.0 | 4.3 | 4.8 | 2.1 | 3.2 |
| LnGrp Delay(d),s/veh | 46.3 | 0.0 | 4.3 | 4.7 | 13.7 | 3.8 |
| LnGrp LOS | D | | A | A | B | A |
| Approach Vol, veh/h | 207 | | 1567 | | | 1378 |
| Approach Delay, s/veh | 46.3 | | 4.4 | | | 4.7 |
| Approach LOS | D | | A | | | A |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 67.5 | | | | 67.5 | | 16.8 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.0 | | | | 63.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 11.1 | | | | 30.9 | | 12.1 |
| Green Ext Time (p_c), s | | 17.0 | | | | 15.3 | | 0.3 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 7.3 |
| HCM 2010 LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1211 | 13 | 50 | 1060 | 149 |
| Future Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1211 | 13 | 50 | 1060 | 149 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 154 | 85 | 134 | 58 | 100 | 17 | 136 | 1316 | 14 | 54 | 1152 | 162 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 196 | 108 | 267 | 78 | 134 | 183 | 172 | 2192 | 23 | 81 | 1674 | 235 |
| Arrive On Green | 0.17 | 0.17 | 0.17 | 0.12 | 0.12 | 0.12 | 0.10 | 0.42 | 0.42 | 0.05 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1163 | 642 | 1583 | 671 | 1158 | 1583 | 1774 | 5188 | 55 | 1774 | 4508 | 634 |
| Grp Volume(v), veh/h | 239 | 0 | 134 | 158 | 0 | 17 | 136 | 860 | 470 | 54 | 866 | 448 |
| Grp Sat Flow(s),veh/h/ln | 1805 | 0 | 1583 | 1829 | 0 | 1583 | 1774 | 1695 | 1853 | 1774 | 1695 | 1751 |
| Q Serve(g_s), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 14.3 | 14.3 | 2.2 | 15.7 | 15.7 |
| Cycle Q Clear(g_c), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 14.3 | 14.3 | 2.2 | 15.7 | 15.7 |
| Prop In Lane | 0.64 | | 1.00 | 0.37 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 0.36 |
| Lane Grp Cap(c), veh/h | 304 | 0 | 267 | 211 | 0 | 183 | 172 | 1432 | 783 | 81 | 1259 | 650 |
| V/C Ratio(X) | 0.79 | 0.00 | 0.50 | 0.75 | 0.00 | 0.09 | 0.79 | 0.60 | 0.60 | 0.67 | 0.69 | 0.69 |
| Avail Cap(c_a), veh/h | 449 | 0 | 394 | 456 | 0 | 394 | 237 | 1432 | 783 | 125 | 1259 | 650 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.9 | 0.0 | 27.4 | 31.1 | 0.0 | 28.7 | 32.1 | 16.2 | 16.2 | 34.1 | 19.3 | 19.3 |
| Incr Delay (d2), s/veh | 5.4 | 0.0 | 1.5 | 5.2 | 0.0 | 0.2 | 11.8 | 1.9 | 3.4 | 9.0 | 3.1 | 5.9 |
| 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 | 5.0 | 0.0 | 2.5 | 3.4 | 0.0 | 0.3 | 3.2 | 6.9 | 7.9 | 1.3 | 7.9 | 8.6 |
| LnGrp Delay(d),s/veh | 34.4 | 0.0 | 28.9 | 36.3 | 0.0 | 28.9 | 43.9 | 18.1 | 19.6 | 43.2 | 22.4 | 25.2 |
| LnGrp LOS | C | | C | D | | C | D | B | B | D | C | C |
| Approach Vol, veh/h | | 373 | | | 175 | | | 1466 | | | 1368 | |
| Approach Delay, s/veh | | 32.4 | | | 35.6 | | | 21.0 | | | 24.1 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 7.8 | 35.2 | | 16.8 | 11.5 | 31.5 | | 12.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.1 | 30.7 | | 18.1 | 9.7 | 26.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 4.2 | 16.3 | | 11.2 | 7.4 | 17.7 | | 8.1 |
| Green Ext Time (p_c), s | 0.0 | 7.7 | | 1.0 | 0.1 | 5.2 | | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 24.3 |
| HCM 2010 LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 265 | 400 | 0 | 1671 | 1457 | 729 |
| Future Volume (vph) | 265 | 400 | 0 | 1671 | 1457 | 729 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.94 | 0.85 | | 1.00 | 0.95 | |
| Flt Protected | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3293 | 1441 | | 5085 | 4831 | |
| Flt Permitted | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3293 | 1441 | | 5085 | 4831 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 288 | 435 | 0 | 1816 | 1584 | 792 |
| RTOR Reduction (vph) | 38 | 38 | 0 | 0 | 46 | 0 |
| Lane Group Flow (vph) | 454 | 193 | 0 | 1816 | 2330 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 24.8 | 24.8 | | 101.7 | 101.7 | |
| Effective Green, g (s) | 24.8 | 24.8 | | 101.7 | 101.7 | |
| Actuated g/C Ratio | 0.18 | 0.18 | | 0.75 | 0.75 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 602 | 263 | | 3816 | 3625 | |
| v/s Ratio Prot | c0.14 | | | 0.36 | c0.48 | |
| v/s Ratio Perm | | 0.13 | | | | |
| v/c Ratio | 0.75 | 0.73 | | 0.48 | 0.64 | |
| Uniform Delay, d1 | 52.5 | 52.2 | | 6.6 | 8.1 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 5.3 | 10.1 | | 0.4 | 0.9 | |
| Delay (s) | 57.8 | 62.3 | | 7.0 | 9.0 | |
| Level of Service | E | E | | A | A | |
| Approach Delay (s) | 59.2 | | | 7.0 | 9.0 | |
| Approach LOS | E | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 15.7 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.66 | | |
| Actuated Cycle Length (s) | 135.5 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 68.5% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 532 | 163 | 436 | 789 | 0 | 0 | 0 | 0 | 220 | 99 | 308 |
| Future Volume (vph) | 0 | 532 | 163 | 436 | 789 | 0 | 0 | 0 | 0 | 220 | 99 | 308 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.93 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2938 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2938 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 578 | 177 | 474 | 858 | 0 | 0 | 0 | 0 | 239 | 108 | 335 |
| RTOR Reduction (vph) | 0 | 0 | 139 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 96 |
| Lane Group Flow (vph) | 0 | 578 | 38 | 474 | 858 | 0 | 0 | 0 | 0 | 177 | 242 | 71 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 15.5 | 15.5 | 15.3 | 35.3 | | | | | 28.8 | 28.8 | 28.8 |
| Effective Green, g (s) | | 15.5 | 15.5 | 15.3 | 35.3 | | | | | 28.8 | 28.8 | 28.8 |
| Actuated g/C Ratio | | 0.21 | 0.21 | 0.21 | 0.48 | | | | | 0.39 | 0.39 | 0.39 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1078 | 335 | 718 | 1708 | | | | | 634 | 1157 | 567 |
| v/s Ratio Prot | | 0.11 | | c0.14 | c0.24 | | | | | c0.11 | 0.08 | |
| v/s Ratio Perm | | | 0.02 | | | | | | | | | 0.05 |
| v/c Ratio | | 0.54 | 0.11 | 0.66 | 0.50 | | | | | 0.28 | 0.21 | 0.13 |
| Uniform Delay, d1 | | 25.6 | 23.2 | 26.5 | 12.9 | | | | | 15.1 | 14.6 | 14.1 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.1 | 2.3 | 0.2 | | | | | 0.2 | 0.1 | 0.5 |
| Delay (s) | | 26.1 | 23.4 | 28.8 | 13.1 | | | | | 15.3 | 14.7 | 14.6 |
| Level of Service | | C | C | C | B | | | | | B | B | B |
| Approach Delay (s) | | 25.5 | | | 18.7 | | | 0.0 | | | 14.8 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.6 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.46 | | |
| Actuated Cycle Length (s) | 73.1 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 70.9% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 203 | 563 | 0 | 0 | 987 | 549 | 253 | 377 | 291 | 0 | 0 | 0 |
| Future Volume (vph) | 203 | 563 | 0 | 0 | 987 | 549 | 253 | 377 | 291 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.99 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1673 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1673 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 221 | 612 | 0 | 0 | 1073 | 597 | 275 | 410 | 316 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 3 | 126 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 221 | 612 | 0 | 0 | 1073 | 523 | 247 | 467 | 158 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 9.7 | 51.5 | | | 37.3 | 37.3 | 24.7 | 24.7 | 24.7 | | | |
| Effective Green, g (s) | 9.7 | 51.5 | | | 37.3 | 37.3 | 24.7 | 24.7 | 24.7 | | | |
| Actuated g/C Ratio | 0.11 | 0.60 | | | 0.44 | 0.44 | 0.29 | 0.29 | 0.29 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 390 | 2139 | | | 1549 | 693 | 487 | 485 | 436 | | | |
| v/s Ratio Prot | c0.06 | 0.17 | | | 0.30 | | 0.15 | c0.28 | | | | |
| v/s Ratio Perm | | | | | | c0.33 | | | 0.10 | | | |
| v/c Ratio | 0.57 | 0.29 | | | 0.69 | 0.76 | 0.51 | 0.96 | 0.36 | | | |
| Uniform Delay, d1 | 35.8 | 8.1 | | | 19.3 | 20.1 | 25.2 | 29.8 | 24.0 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 1.9 | 0.1 | | | 1.4 | 4.7 | 0.8 | 31.4 | 2.3 | | | |
| Delay (s) | 37.6 | 8.1 | | | 20.7 | 24.8 | 26.0 | 61.2 | 26.3 | | | |
| Level of Service | D | A | | | C | C | C | E | C | | | |
| Approach Delay (s) | | 16.0 | | | 22.2 | | | 42.6 | | | 0.0 | |
| Approach LOS | | B | | | C | | | D | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.5 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.80 | | |
| Actuated Cycle Length (s) | 85.2 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 70.9% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 91 | 307 | 107 | 28 | 712 | 224 | 48 | 223 | 8 | 159 | 269 | 220 |
| Future Volume (vph) | 91 | 307 | 107 | 28 | 712 | 224 | 48 | 223 | 8 | 159 | 269 | 220 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3402 | | 1770 | 3412 | | 1770 | 1853 | | 1770 | 1863 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3402 | | 1770 | 3412 | | 1770 | 1853 | | 1770 | 1863 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 99 | 334 | 116 | 30 | 774 | 243 | 52 | 242 | 9 | 173 | 292 | 239 |
| RTOR Reduction (vph) | 0 | 37 | 0 | 0 | 35 | 0 | 0 | 1 | 0 | 0 | 0 | 162 |
| Lane Group Flow (vph) | 99 | 413 | 0 | 30 | 982 | 0 | 52 | 250 | 0 | 173 | 292 | 77 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | 8.9 | 24.9 | | 11.3 | 27.3 | | 6.9 | 22.9 | | 12.9 | 28.9 | 28.9 |
| Effective Green, g (s) | 8.9 | 24.9 | | 11.3 | 27.3 | | 6.9 | 22.9 | | 12.9 | 28.9 | 28.9 |
| Actuated g/C Ratio | 0.10 | 0.28 | | 0.13 | 0.30 | | 0.08 | 0.25 | | 0.14 | 0.32 | 0.32 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 175 | 941 | | 222 | 1034 | | 135 | 471 | | 253 | 598 | 508 |
| v/s Ratio Prot | c0.06 | 0.12 | | 0.02 | c0.29 | | 0.03 | 0.13 | | c0.10 | c0.16 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.05 |
| v/c Ratio | 0.57 | 0.44 | | 0.14 | 0.95 | | 0.39 | 0.53 | | 0.68 | 0.49 | 0.15 |
| Uniform Delay, d1 | 38.7 | 26.8 | | 35.0 | 30.7 | | 39.5 | 28.9 | | 36.6 | 24.6 | 21.8 |
| Progression Factor | 1.00 | 1.00 | | 0.72 | 0.51 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 4.1 | 1.5 | | 0.2 | 16.6 | | 1.8 | 4.2 | | 7.4 | 2.8 | 0.6 |
| Delay (s) | 42.9 | 28.3 | | 25.6 | 32.3 | | 41.4 | 33.1 | | 44.0 | 27.4 | 22.4 |
| Level of Service | D | C | | C | C | | D | C | | D | C | C |
| Approach Delay (s) | | 30.9 | | | 32.1 | | | 34.5 | | | 29.8 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 31.5 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.72 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 67.9% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 72 | 379 | 11 | 159 | 708 | 65 | 17 | 69 | 123 | 90 | 109 | 217 |
| Future Volume (vph) | 72 | 379 | 11 | 159 | 708 | 65 | 17 | 69 | 123 | 90 | 109 | 217 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | | 1.00 | 0.85 | 1.00 | 0.90 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3524 | | 1770 | 3494 | | | 1845 | 1583 | 1770 | 1676 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.63 | 1.00 | 0.70 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3524 | | 1770 | 3494 | | | 1179 | 1583 | 1298 | 1676 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 78 | 412 | 12 | 173 | 770 | 71 | 18 | 75 | 134 | 98 | 118 | 236 |
| RTOR Reduction (vph) | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 106 | 0 | 91 | 0 |
| Lane Group Flow (vph) | 78 | 422 | 0 | 173 | 835 | 0 | 0 | 93 | 28 | 98 | 263 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 14.7 | 44.8 | | 12.6 | 42.7 | | | 19.1 | 19.1 | 19.1 | 19.1 | |
| Effective Green, g (s) | 14.7 | 44.8 | | 12.6 | 42.7 | | | 19.1 | 19.1 | 19.1 | 19.1 | |
| Actuated g/C Ratio | 0.16 | 0.50 | | 0.14 | 0.47 | | | 0.21 | 0.21 | 0.21 | 0.21 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 289 | 1754 | | 247 | 1657 | | | 250 | 335 | 275 | 355 | |
| v/s Ratio Prot | 0.04 | 0.12 | | c0.10 | c0.24 | | | | | | c0.16 | |
| v/s Ratio Perm | | | | | | | | 0.08 | 0.02 | 0.08 | | |
| v/c Ratio | 0.27 | 0.24 | | 0.70 | 0.50 | | | 0.37 | 0.08 | 0.36 | 0.74 | |
| Uniform Delay, d1 | 33.0 | 12.9 | | 36.9 | 16.3 | | | 30.3 | 28.4 | 30.2 | 33.1 | |
| Progression Factor | 1.08 | 0.20 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 0.4 | 0.3 | | 8.6 | 1.1 | | | 0.9 | 0.1 | 0.8 | 8.1 | |
| Delay (s) | 35.9 | 2.9 | | 45.5 | 17.4 | | | 31.3 | 28.5 | 31.0 | 41.3 | |
| Level of Service | D | A | | D | B | | | C | C | C | D | |
| Approach Delay (s) | | 8.0 | | | 22.2 | | | 29.7 | | | 39.0 | |
| Approach LOS | | A | | | C | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 23.2 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.58 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 2 | 331 | 395 | 237 | 562 | 0 | 0 | 0 | 0 | 229 | 2 | 377 |
| Future Volume (vph) | 2 | 331 | 395 | 237 | 562 | 0 | 0 | 0 | 0 | 229 | 2 | 377 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.92 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3251 | | 1610 | 3383 | | | | | 1681 | 1687 | 1583 |
| Flt Permitted | | 0.95 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3100 | | 1610 | 3179 | | | | | 1681 | 1687 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 2 | 360 | 429 | 258 | 611 | 0 | 0 | 0 | 0 | 249 | 2 | 410 |
| RTOR Reduction (vph) | 0 | 284 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211 |
| Lane Group Flow (vph) | 0 | 507 | 0 | 232 | 637 | 0 | 0 | 0 | 0 | 124 | 127 | 199 |
| Turn Type | Perm | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | 4 | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 17.5 | | 14.6 | 36.6 | | | | | 23.9 | 23.9 | 23.9 |
| Effective Green, g (s) | | 17.5 | | 14.6 | 36.6 | | | | | 23.9 | 23.9 | 23.9 |
| Actuated g/C Ratio | | 0.25 | | 0.21 | 0.53 | | | | | 0.34 | 0.34 | 0.34 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 780 | | 338 | 1716 | | | | | 578 | 580 | 544 |
| v/s Ratio Prot | | | | c0.14 | 0.08 | | | | | 0.07 | 0.08 | |
| v/s Ratio Perm | | c0.16 | | | 0.12 | | | | | | | c0.13 |
| v/c Ratio | | 0.65 | | 0.69 | 0.37 | | | | | 0.21 | 0.22 | 0.37 |
| Uniform Delay, d1 | | 23.3 | | 25.3 | 9.7 | | | | | 16.2 | 16.2 | 17.1 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 1.9 | | 5.7 | 0.1 | | | | | 0.2 | 0.2 | 1.9 |
| Delay (s) | | 25.1 | | 31.0 | 9.8 | | | | | 16.3 | 16.4 | 19.0 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 25.1 | | | 15.5 | | | 0.0 | | | 18.0 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.5 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.54 | | |
| Actuated Cycle Length (s) | 69.5 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 55.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 405 | 254 | 176 | 452 | 363 | 167 | 268 | 1512 | 351 | 141 | 1105 | 363 |
| Future Volume (veh/h) | 405 | 254 | 176 | 452 | 363 | 167 | 268 | 1512 | 351 | 141 | 1105 | 363 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 440 | 276 | 191 | 491 | 395 | 182 | 291 | 1643 | 382 | 153 | 1201 | 395 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 551 | 567 | 254 | 621 | 639 | 286 | 352 | 2358 | 734 | 206 | 2143 | 667 |
| Arrive On Green | 0.16 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.10 | 0.46 | 0.46 | 0.06 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 440 | 276 | 191 | 491 | 395 | 182 | 291 | 1643 | 382 | 153 | 1201 | 395 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 16.3 | 9.4 | 15.3 | 18.1 | 13.7 | 14.1 | 11.0 | 34.0 | 22.6 | 5.8 | 23.7 | 25.5 |
| Cycle Q Clear(g_c), s | 16.3 | 9.4 | 15.3 | 18.1 | 13.7 | 14.1 | 11.0 | 34.0 | 22.6 | 5.8 | 23.7 | 25.5 |
| 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 | 551 | 567 | 254 | 621 | 639 | 286 | 352 | 2358 | 734 | 206 | 2143 | 667 |
| V/C Ratio(X) | 0.80 | 0.49 | 0.75 | 0.79 | 0.62 | 0.64 | 0.83 | 0.70 | 0.52 | 0.74 | 0.56 | 0.59 |
| Avail Cap(c_a), veh/h | 714 | 734 | 328 | 791 | 814 | 364 | 506 | 2358 | 734 | 324 | 2143 | 667 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.6 | 50.7 | 53.2 | 52.0 | 50.1 | 50.3 | 58.4 | 28.2 | 25.1 | 61.3 | 29.1 | 29.6 |
| Incr Delay (d2), s/veh | 4.9 | 0.6 | 7.0 | 4.2 | 1.0 | 2.4 | 7.5 | 1.7 | 2.6 | 5.2 | 1.1 | 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 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.1 | 4.7 | 7.2 | 9.0 | 6.8 | 6.3 | 5.6 | 16.2 | 10.4 | 2.9 | 11.3 | 11.8 |
| LnGrp Delay(d),s/veh | 58.5 | 51.4 | 60.2 | 56.2 | 51.1 | 52.7 | 65.9 | 29.9 | 27.8 | 66.5 | 30.1 | 33.4 |
| LnGrp LOS | E | D | E | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 907 | | | 1068 | | | 2316 | | | 1749 | |
| Approach Delay, s/veh | | 56.7 | | | 53.7 | | | 34.1 | | | 34.1 | |
| Approach LOS | | E | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 12.5 | 66.0 | | 25.8 | 18.0 | 60.4 | | 28.4 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 12.5 | 61.5 | | 27.5 | 19.5 | 54.5 | | 30.5 |
| Max Q Clear Time (g_c+I1), s | 7.8 | 36.0 | | 18.3 | 13.0 | 27.5 | | 20.1 |
| Green Ext Time (p_c), s | 0.2 | 16.1 | | 2.9 | 0.6 | 12.1 | | 3.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 40.9 |
| HCM 2010 LOS | D |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 467 | 1136 | 1498 | 377 | 0 | 1722 |
| Future Volume (veh/h) | 467 | 1136 | 1498 | 377 | 0 | 1722 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 508 | 1235 | 1628 | 410 | 0 | 1872 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1619 | 1311 | 1902 | 473 | 0 | 2381 |
| Arrive On Green | 0.47 | 0.47 | 0.47 | 0.47 | 0.00 | 0.47 |
| Sat Flow, veh/h | 3442 | 2787 | 4232 | 1011 | 0 | 5421 |
| Grp Volume(v), veh/h | 508 | 1235 | 1355 | 683 | 0 | 1872 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1684 | 0 | 1695 |
| Q Serve(g_s), s | 13.4 | 61.7 | 51.8 | 53.1 | 0.0 | 45.3 |
| Cycle Q Clear(g_c), s | 13.4 | 61.7 | 51.8 | 53.1 | 0.0 | 45.3 |
| Prop In Lane | 1.00 | 1.00 | | 0.60 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1619 | 1311 | 1587 | 789 | 0 | 2381 |
| V/C Ratio(X) | 0.31 | 0.94 | 0.85 | 0.87 | 0.00 | 0.79 |
| Avail Cap(c_a), veh/h | 1705 | 1381 | 1587 | 789 | 0 | 2381 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.1 | 36.9 | 34.5 | 34.8 | 0.0 | 32.8 |
| Incr Delay (d2), s/veh | 0.1 | 12.6 | 6.1 | 12.3 | 0.0 | 2.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.4 | 26.0 | 25.6 | 27.4 | 0.0 | 21.7 |
| LnGrp Delay(d),s/veh | 24.2 | 49.4 | 40.5 | 47.1 | 0.0 | 35.5 |
| LnGrp LOS | C | D | D | D | | D |
| Approach Vol, veh/h | 1743 | | 2038 | | | 1872 |
| Approach Delay, s/veh | 42.1 | | 42.7 | | | 35.5 |
| Approach LOS | D | | D | | | D |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 73.0 | | | | 73.0 | | 73.3 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 68.5 | | | | 68.5 | | 72.5 |
| Max Q Clear Time (g_c+I1), s | | 55.1 | | | | 47.3 | | 63.7 |
| Green Ext Time (p_c), s | | 10.6 | | | | 14.5 | | 5.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 40.1 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 211 | 543 | 105 | 34 | 964 | 131 | 92 | 71 | 21 | 132 | 115 | 382 |
| Future Volume (veh/h) | 211 | 543 | 105 | 34 | 964 | 131 | 92 | 71 | 21 | 132 | 115 | 382 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 229 | 590 | 114 | 37 | 1048 | 142 | 100 | 77 | 23 | 143 | 125 | 415 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 267 | 1479 | 285 | 59 | 1199 | 162 | 202 | 442 | 132 | 285 | 220 | 507 |
| Arrive On Green | 0.15 | 0.50 | 0.50 | 0.03 | 0.38 | 0.38 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1774 | 2961 | 571 | 1774 | 3133 | 424 | 862 | 1378 | 412 | 703 | 687 | 1583 |
| Grp Volume(v), veh/h | 229 | 352 | 352 | 37 | 591 | 599 | 100 | 0 | 100 | 268 | 0 | 415 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1762 | 1774 | 1770 | 1788 | 862 | 0 | 1790 | 1390 | 0 | 1583 |
| Q Serve(g_s), s | 11.6 | 11.4 | 11.5 | 1.9 | 28.5 | 28.6 | 10.3 | 0.0 | 3.7 | 12.6 | 0.0 | 22.2 |
| Cycle Q Clear(g_c), s | 11.6 | 11.4 | 11.5 | 1.9 | 28.5 | 28.6 | 26.7 | 0.0 | 3.7 | 16.3 | 0.0 | 22.2 |
| Prop In Lane | 1.00 | | 0.32 | 1.00 | | 0.24 | 1.00 | | 0.23 | 0.53 | | 1.00 |
| Lane Grp Cap(c), veh/h | 267 | 884 | 880 | 59 | 677 | 684 | 202 | 0 | 574 | 505 | 0 | 507 |
| V/C Ratio(X) | 0.86 | 0.40 | 0.40 | 0.63 | 0.87 | 0.88 | 0.50 | 0.00 | 0.17 | 0.53 | 0.00 | 0.82 |
| Avail Cap(c_a), veh/h | 357 | 975 | 970 | 121 | 740 | 748 | 202 | 0 | 574 | 505 | 0 | 507 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 38.2 | 14.4 | 14.4 | 43.9 | 26.4 | 26.4 | 38.2 | 0.0 | 22.5 | 27.6 | 0.0 | 28.8 |
| Incr Delay (d2), s/veh | 14.7 | 0.3 | 0.3 | 10.5 | 10.6 | 10.7 | 8.4 | 0.0 | 0.7 | 3.9 | 0.0 | 13.7 |
| 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 | 6.7 | 5.6 | 5.6 | 1.1 | 15.8 | 16.2 | 2.9 | 0.0 | 1.9 | 6.4 | 0.0 | 11.6 |
| LnGrp Delay(d),s/veh | 52.8 | 14.7 | 14.7 | 54.4 | 37.0 | 37.0 | 46.7 | 0.0 | 23.2 | 31.5 | 0.0 | 42.5 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | D |
| Approach Vol, veh/h | | 933 | | | 1227 | | | 200 | | | 683 | |
| Approach Delay, s/veh | | 24.0 | | | 37.5 | | | 34.9 | | | 38.2 | |
| Approach LOS | | C | | | D | | | C | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 34.0 | 7.6 | 50.5 | | 34.0 | 18.3 | 39.7 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 29.5 | 6.3 | 50.7 | | 29.5 | 18.5 | 38.5 |
| Max Q Clear Time (g_c+I1), s | | 28.7 | 3.9 | 13.5 | | 24.2 | 13.6 | 30.6 |
| Green Ext Time (p_c), s | | 0.1 | 0.0 | 5.1 | | 1.6 | 0.3 | 4.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.4 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 19 | 607 | 38 | 30 | 879 | 27 | 68 | 13 | 55 | 32 | 18 | 91 |
| Future Volume (veh/h) | 19 | 607 | 38 | 30 | 879 | 27 | 68 | 13 | 55 | 32 | 18 | 91 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 21 | 660 | 41 | 33 | 955 | 29 | 74 | 14 | 60 | 35 | 20 | 99 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 40 | 1086 | 67 | 55 | 1156 | 35 | 204 | 39 | 165 | 367 | 385 | 327 |
| Arrive On Green | 0.02 | 0.32 | 0.32 | 0.03 | 0.33 | 0.33 | 0.24 | 0.24 | 0.24 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3385 | 210 | 1774 | 3507 | 106 | 849 | 161 | 689 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 21 | 345 | 356 | 33 | 482 | 502 | 148 | 0 | 0 | 35 | 20 | 99 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1826 | 1774 | 1770 | 1844 | 1699 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 1.0 | 14.7 | 14.7 | 1.6 | 22.5 | 22.5 | 6.5 | 0.0 | 0.0 | 1.4 | 0.8 | 4.7 |
| Cycle Q Clear(g_c), s | 1.0 | 14.7 | 14.7 | 1.6 | 22.5 | 22.5 | 6.5 | 0.0 | 0.0 | 1.4 | 0.8 | 4.7 |
| Prop In Lane | 1.00 | | 0.12 | 1.00 | | 0.06 | 0.50 | | 0.41 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 40 | 568 | 586 | 55 | 583 | 608 | 408 | 0 | 0 | 367 | 385 | 327 |
| V/C Ratio(X) | 0.52 | 0.61 | 0.61 | 0.59 | 0.83 | 0.83 | 0.36 | 0.00 | 0.00 | 0.10 | 0.05 | 0.30 |
| Avail Cap(c_a), veh/h | 109 | 702 | 724 | 129 | 721 | 752 | 408 | 0 | 0 | 367 | 385 | 327 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 43.3 | 25.6 | 25.6 | 42.8 | 27.7 | 27.7 | 28.3 | 0.0 | 0.0 | 28.7 | 28.5 | 30.1 |
| Incr Delay (d2), s/veh | 10.0 | 1.1 | 1.0 | 9.8 | 6.5 | 6.3 | 2.5 | 0.0 | 0.0 | 0.5 | 0.3 | 2.4 |
| 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 | 0.6 | 7.3 | 7.6 | 1.0 | 12.0 | 12.5 | 3.3 | 0.0 | 0.0 | 0.8 | 0.4 | 2.3 |
| LnGrp Delay(d),s/veh | 53.3 | 26.7 | 26.7 | 52.6 | 34.2 | 33.9 | 30.8 | 0.0 | 0.0 | 29.3 | 28.7 | 32.4 |
| LnGrp LOS | D | C | C | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 722 | | | 1017 | | | 148 | | | 154 | |
| Approach Delay, s/veh | | 27.5 | | | 34.6 | | | 30.8 | | | 31.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 26.0 | 7.3 | 33.2 | | 23.0 | 6.5 | 34.0 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 21.5 | 6.5 | 35.5 | | 18.5 | 5.5 | 36.5 |
| Max Q Clear Time (g_c+I1), s | | 8.5 | 3.6 | 16.7 | | 6.7 | 3.0 | 24.5 |
| Green Ext Time (p_c), s | | 0.6 | 0.0 | 4.2 | | 0.3 | 0.0 | 5.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 31.6 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 196 | 274 | 245 | 289 | 447 | 202 | 325 | 1401 | 110 | 326 | 1232 | 187 |
| Future Volume (veh/h) | 196 | 274 | 245 | 289 | 447 | 202 | 325 | 1401 | 110 | 326 | 1232 | 187 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 213 | 298 | 266 | 314 | 486 | 220 | 353 | 1523 | 120 | 354 | 1339 | 203 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 237 | 560 | 251 | 727 | 561 | 253 | 409 | 1946 | 606 | 410 | 1948 | 606 |
| Arrive On Green | 0.13 | 0.16 | 0.16 | 0.21 | 0.24 | 0.24 | 0.12 | 0.38 | 0.38 | 0.12 | 0.38 | 0.38 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2375 | 1069 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 213 | 298 | 266 | 314 | 361 | 345 | 353 | 1523 | 120 | 354 | 1339 | 203 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1674 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 16.6 | 10.8 | 17.3 | 11.1 | 27.4 | 27.7 | 14.1 | 36.9 | 3.9 | 14.1 | 30.9 | 8.6 |
| Cycle Q Clear(g_c), s | 16.6 | 10.8 | 17.3 | 11.1 | 27.4 | 27.7 | 14.1 | 36.9 | 3.9 | 14.1 | 30.9 | 8.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.64 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 237 | 560 | 251 | 727 | 418 | 396 | 409 | 1946 | 606 | 410 | 1948 | 606 |
| V/C Ratio(X) | 0.90 | 0.53 | 1.06 | 0.43 | 0.86 | 0.87 | 0.86 | 0.78 | 0.20 | 0.86 | 0.69 | 0.33 |
| Avail Cap(c_a), veh/h | 260 | 1024 | 458 | 727 | 512 | 484 | 504 | 1946 | 606 | 504 | 1948 | 606 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 0.60 | 0.60 | 0.60 | 1.00 | 1.00 | 1.00 | 0.70 | 0.70 | 0.70 |
| Uniform Delay (d), s/veh | 59.8 | 54.1 | 36.1 | 47.9 | 51.3 | 51.4 | 60.6 | 38.1 | 8.8 | 60.5 | 36.2 | 14.1 |
| Incr Delay (d2), s/veh | 24.7 | 0.6 | 46.9 | 0.2 | 7.9 | 8.8 | 12.3 | 3.2 | 0.7 | 9.1 | 1.4 | 1.0 |
| 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 | 9.7 | 5.3 | 11.3 | 5.3 | 14.4 | 13.8 | 7.4 | 17.9 | 3.0 | 7.3 | 14.6 | 5.0 |
| LnGrp Delay(d),s/veh | 84.5 | 54.8 | 82.9 | 48.2 | 59.2 | 60.2 | 72.9 | 41.3 | 9.6 | 69.7 | 37.6 | 15.2 |
| LnGrp LOS | F | D | F | D | E | E | E | D | A | E | D | B |
| Approach Vol, veh/h | | 777 | | | 1020 | | | 1996 | | | 1896 | |
| Approach Delay, s/veh | | 72.5 | | | 56.2 | | | 45.0 | | | 41.2 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 23.2 | 37.6 | 21.2 | 58.1 | 34.1 | 26.7 | 21.1 | 58.1 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 |
| Max Q Clear Time (g_c+I1), s | 18.6 | 29.7 | 16.1 | 38.9 | 13.1 | 19.3 | 16.1 | 32.9 |
| Green Ext Time (p_c), s | 0.1 | 3.4 | 0.5 | 1.3 | 0.7 | 2.8 | 0.5 | 5.3 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 49.5 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 214 | 394 | 0 | 0 | 391 | 206 | 334 | 2 | 0 | 87 | 0 | 82 |
| Future Volume (veh/h) | 214 | 394 | 0 | 0 | 391 | 206 | 334 | 2 | 0 | 87 | 0 | 82 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 233 | 428 | 0 | 0 | 425 | 224 | 363 | 2 | 0 | 95 | 0 | 89 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 341 | 716 | 0 | 0 | 710 | 332 | 0 | 596 | 0 | 122 | 0 | 0 |
| Arrive On Green | 0.10 | 0.38 | 0.00 | 0.00 | 0.21 | 0.21 | 0.00 | 0.32 | 0.00 | 0.07 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 95 | |
| Grp Volume(v), veh/h | 233 | 428 | 0 | 0 | 425 | 224 | 0 | 2 | 0 | 95 | 37.3 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | D | |
| Q Serve(g_s), s | 3.9 | 10.9 | 0.0 | 0.0 | 6.7 | 7.7 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Cycle Q Clear(g_c), s | 3.9 | 10.9 | 0.0 | 0.0 | 6.7 | 7.7 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 341 | 716 | 0 | 0 | 710 | 332 | 0 | 596 | 0 | 122 | | |
| V/C Ratio(X) | 0.68 | 0.60 | 0.00 | 0.00 | 0.60 | 0.68 | 0.00 | 0.00 | 0.00 | 0.78 | | |
| Avail Cap(c_a), veh/h | 434 | 940 | 0 | 0 | 1027 | 480 | 0 | 596 | 0 | 224 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 25.9 | 14.6 | 0.0 | 0.0 | 21.2 | 21.6 | 0.0 | 13.8 | 0.0 | 27.2 | | |
| Incr Delay (d2), s/veh | 3.0 | 0.8 | 0.0 | 0.0 | 0.8 | 2.4 | 0.0 | 0.0 | 0.0 | 10.1 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 2.0 | 5.7 | 0.0 | 0.0 | 3.2 | 3.6 | 0.0 | 0.0 | 0.0 | 1.9 | | |
| LnGrp Delay(d),s/veh | 28.9 | 15.4 | 0.0 | 0.0 | 22.0 | 24.0 | 0.0 | 13.8 | 0.0 | 37.3 | | |
| LnGrp LOS | C | B | | | C | C | | B | | D | | |
| Approach Vol, veh/h | | 661 | | | 649 | | | 2 | | | | |
| Approach Delay, s/veh | | 20.2 | | | 22.7 | | | 13.8 | | | | |
| Approach LOS | | C | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 23.5 | | 27.3 | 0.0 | | 10.4 | 16.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 19.0 | | 30.0 | 5.0 | | 7.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | 5.1 | 2.0 | | 12.9 | 0.0 | | 5.9 | 9.7 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 2.5 | 0.0 | | 0.1 | 2.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.5 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 16 | 28 | 7 | 12 | 79 | 46 | 2 | 73 | 1 | 9 | 59 | 12 |
| Future Vol, veh/h | 16 | 28 | 7 | 12 | 79 | 46 | 2 | 73 | 1 | 9 | 59 | 12 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 30 | 8 | 13 | 86 | 50 | 2 | 79 | 1 | 10 | 64 | 13 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.8 | 8.1 | 8 | 8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 3% | 31% | 9% | 11% |
| Vol Thru, % | 96% | 55% | 58% | 74% |
| Vol Right, % | 1% | 14% | 34% | 15% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 76 | 51 | 137 | 80 |
| LT Vol | 2 | 16 | 12 | 9 |
| Through Vol | 73 | 28 | 79 | 59 |
| RT Vol | 1 | 7 | 46 | 12 |
| Lane Flow Rate | 83 | 55 | 149 | 87 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.103 | 0.069 | 0.174 | 0.107 |
| Departure Headway (Hd) | 4.484 | 4.463 | 4.203 | 4.416 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 801 | 804 | 856 | 814 |
| Service Time | 2.501 | 2.481 | 2.218 | 2.432 |
| HCM Lane V/C Ratio | 0.104 | 0.068 | 0.174 | 0.107 |
| HCM Control Delay | 8 | 7.8 | 8.1 | 8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.2 | 0.6 | 0.4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 1 | 52 | 12 | 39 | 119 | 14 | 11 | 3 | 27 | 5 | 3 | 3 |
| Future Vol, veh/h | 1 | 52 | 12 | 39 | 119 | 14 | 11 | 3 | 27 | 5 | 3 | 3 |
| 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 | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 57 | 13 | 42 | 129 | 15 | 12 | 3 | 29 | 5 | 3 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 144 | 0 | 0 | 70 | 0 | 0 | 290 | 294 | 64 | 303 | 293 | 137 |
| Stage 1 | - | - | - | - | - | - | 66 | 66 | - | 221 | 221 | - |
| Stage 2 | - | - | - | - | - | - | 224 | 228 | - | 82 | 72 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1438 | - | - | 1531 | - | - | 662 | 617 | 1000 | 649 | 618 | 911 |
| Stage 1 | - | - | - | - | - | - | 945 | 840 | - | 781 | 720 | - |
| Stage 2 | - | - | - | - | - | - | 779 | 715 | - | 926 | 835 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1438 | - | - | 1531 | - | - | 641 | 598 | 1000 | 613 | 599 | 911 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 641 | 598 | - | 613 | 599 | - |
| Stage 1 | - | - | - | - | - | - | 944 | 839 | - | 780 | 698 | - |
| Stage 2 | - | - | - | - | - | - | 749 | 694 | - | 894 | 834 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 1.7 | 9.6 | 10.5 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 834 | 1438 | - | - | 1531 | - | - | 668 |
| HCM Lane V/C Ratio | 0.053 | 0.001 | - | - | 0.028 | - | - | 0.018 |
| HCM Control Delay (s) | 9.6 | 7.5 | 0 | - | 7.4 | 0 | - | 10.5 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0.1 | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 99 | 6 | 3 | 157 | 3 | 0 | 0 | 3 | 0 | 0 | 0 |
| Future Vol, veh/h | 3 | 99 | 6 | 3 | 157 | 3 | 0 | 0 | 3 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 108 | 7 | 3 | 171 | 3 | 0 | 0 | 3 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 174 | 0 | 0 | 115 | 0 | 0 | 297 | 298 | 112 | 298 | 300 | 173 |
| Stage 1 | - | - | - | - | - | - | 118 | 118 | - | 179 | 179 | - |
| Stage 2 | - | - | - | - | - | - | 179 | 180 | - | 119 | 121 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1403 | - | - | 1474 | - | - | 655 | 614 | 941 | 654 | 612 | 871 |
| Stage 1 | - | - | - | - | - | - | 887 | 798 | - | 823 | 751 | - |
| Stage 2 | - | - | - | - | - | - | 823 | 750 | - | 885 | 796 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1403 | - | - | 1474 | - | - | 653 | 612 | 941 | 649 | 610 | 871 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 653 | 612 | - | 649 | 610 | - |
| Stage 1 | - | - | - | - | - | - | 885 | 796 | - | 821 | 749 | - |
| Stage 2 | - | - | - | - | - | - | 821 | 749 | - | 880 | 794 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.1 | 8.8 | 0 |
| HCM LOS | | | A | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 941 | 1403 | - | - | 1474 | - | - | - |
| HCM Lane V/C Ratio | 0.003 | 0.002 | - | - | 0.002 | - | - | - |
| HCM Control Delay (s) | 8.8 | 7.6 | 0 | - | 7.4 | 0 | - | 0 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 17.2 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 17 | 67 | 85 | 1715 | 1688 | 88 |
| Future Vol, veh/h | 17 | 67 | 85 | 1715 | 1688 | 88 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 250 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 73 | 92 | 1864 | 1835 | 96 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 2813 | 966 | 1931 | 0 | - | 0 |
| Stage 1 | 1883 | - | - | - | - | - |
| Stage 2 | 930 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | 5.34 | - | - | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | 3.12 | - | - | - |
| Pot Cap-1 Maneuver | 33 | 219 | 136 | - | - | - |
| Stage 1 | 68 | - | - | - | - | - |
| Stage 2 | 311 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | ~ 11 | 219 | 136 | - | - | - |
| Mov Cap-2 Maneuver | ~ 11 | - | - | - | - | - |
| Stage 1 | 22 | - | - | - | - | - |
| Stage 2 | 311 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | $ 672.4 | 3.5 | 0 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 136 | - | 45 | - | - |
| HCM Lane V/C Ratio | 0.679 | - | 2.029 | - | - |
| HCM Control Delay (s) | 74.6 | - | $ 672.4 | - | - |
| HCM Lane LOS | F | - | F | - | - |
| HCM 95th %tile Q(veh) | 3.8 | - | 9.4 | - | - |

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 9 | 18 | 30 | 7 | 5 | 4 | 4 |
| Future Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 9 | 18 | 30 | 7 | 5 | 4 | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 25 | 4 | 16 | 26 | 10 | 20 | 33 | 8 | 5 | 4 | 4 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.2 | 7.3 | 7.4 | 7.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 33% | 10% | 31% | 38% |
| Vol Thru, % | 55% | 77% | 50% | 31% |
| Vol Right, % | 13% | 13% | 19% | 31% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 55 | 30 | 48 | 13 |
| LT Vol | 18 | 3 | 15 | 5 |
| Through Vol | 30 | 23 | 24 | 4 |
| RT Vol | 7 | 4 | 9 | 4 |
| Lane Flow Rate | 60 | 33 | 52 | 14 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.068 | 0.037 | 0.059 | 0.016 |
| Departure Headway (Hd) | 4.08 | 4.042 | 4.038 | 4.018 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 874 | 881 | 883 | 884 |
| Service Time | 2.124 | 2.089 | 2.08 | 2.072 |
| HCM Lane V/C Ratio | 0.069 | 0.037 | 0.059 | 0.016 |
| HCM Control Delay | 7.4 | 7.2 | 7.3 | 7.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.1 | 0.2 | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 102 | 108 | 1655 | 36 | 170 | 1559 |
| Future Volume (veh/h) | 102 | 108 | 1655 | 36 | 170 | 1559 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 111 | 117 | 1799 | 39 | 185 | 1695 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 127 | 133 | 3848 | 83 | 229 | 3820 |
| Arrive On Green | 0.16 | 0.16 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 810 | 854 | 5290 | 111 | 251 | 5253 |
| Grp Volume(v), veh/h | 229 | 0 | 1190 | 648 | 185 | 1695 |
| Grp Sat Flow(s),veh/h/ln | 1672 | 0 | 1695 | 1843 | 251 | 1695 |
| Q Serve(g_s), s | 13.0 | 0.0 | 13.1 | 13.1 | 59.9 | 12.1 |
| Cycle Q Clear(g_c), s | 13.0 | 0.0 | 13.1 | 13.1 | 73.0 | 12.1 |
| Prop In Lane | 0.48 | 0.51 | | 0.06 | 1.00 | |
| Lane Grp Cap(c), veh/h | 261 | 0 | 2546 | 1384 | 229 | 3820 |
| V/C Ratio(X) | 0.88 | 0.00 | 0.47 | 0.47 | 0.81 | 0.44 |
| Avail Cap(c_a), veh/h | 310 | 0 | 2546 | 1384 | 229 | 3820 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 4.6 | 4.6 | 23.5 | 4.5 |
| Incr Delay (d2), s/veh | 21.0 | 0.0 | 0.6 | 1.1 | 25.6 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.5 | 0.0 | 6.2 | 6.9 | 6.6 | 5.6 |
| LnGrp Delay(d),s/veh | 61.1 | 0.0 | 5.3 | 5.8 | 49.1 | 4.9 |
| LnGrp LOS | E | | A | A | D | A |
| Approach Vol, veh/h | 229 | | 1838 | | | 1880 |
| Approach Delay, s/veh | 61.1 | | 5.4 | | | 9.2 |
| Approach LOS | E | | A | | | A |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 77.5 | | | | 77.5 | | 19.7 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 73.0 | | | | 73.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 15.1 | | | | 75.0 | | 15.0 |
| Green Ext Time (p_c), s | | 23.2 | | | | 0.0 | | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 10.5 |
| HCM 2010 LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1435 | 40 | 111 | 1419 | 161 |
| Future Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1435 | 40 | 111 | 1419 | 161 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 108 | 53 | 114 | 117 | 54 | 65 | 153 | 1560 | 43 | 121 | 1542 | 175 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 146 | 72 | 191 | 154 | 71 | 197 | 189 | 2269 | 63 | 153 | 1972 | 223 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 | 0.45 | 0.45 | 0.09 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1209 | 593 | 1583 | 1232 | 569 | 1583 | 1774 | 5088 | 140 | 1774 | 4635 | 525 |
| Grp Volume(v), veh/h | 161 | 0 | 114 | 171 | 0 | 65 | 153 | 1039 | 564 | 121 | 1127 | 590 |
| Grp Sat Flow(s),veh/h/ln | 1802 | 0 | 1583 | 1801 | 0 | 1583 | 1774 | 1695 | 1838 | 1774 | 1695 | 1770 |
| Q Serve(g_s), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 19.8 | 19.8 | 5.4 | 23.2 | 23.2 |
| Cycle Q Clear(g_c), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 19.8 | 19.8 | 5.4 | 23.2 | 23.2 |
| Prop In Lane | 0.67 | | 1.00 | 0.68 | | 1.00 | 1.00 | | 0.08 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 218 | 0 | 191 | 225 | 0 | 197 | 189 | 1512 | 820 | 153 | 1442 | 753 |
| V/C Ratio(X) | 0.74 | 0.00 | 0.60 | 0.76 | 0.00 | 0.33 | 0.81 | 0.69 | 0.69 | 0.79 | 0.78 | 0.78 |
| Avail Cap(c_a), veh/h | 403 | 0 | 354 | 403 | 0 | 354 | 256 | 1512 | 820 | 213 | 1442 | 753 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 0.0 | 33.7 | 34.3 | 0.0 | 32.3 | 35.4 | 17.9 | 17.9 | 36.3 | 20.0 | 20.0 |
| Incr Delay (d2), s/veh | 4.8 | 0.0 | 2.9 | 5.3 | 0.0 | 1.0 | 12.8 | 2.6 | 4.7 | 12.7 | 4.3 | 8.0 |
| 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 | 3.8 | 0.0 | 2.6 | 4.0 | 0.0 | 1.4 | 4.0 | 9.8 | 11.1 | 3.2 | 11.7 | 13.0 |
| LnGrp Delay(d),s/veh | 39.2 | 0.0 | 36.7 | 39.5 | 0.0 | 33.3 | 48.2 | 20.5 | 22.6 | 49.0 | 24.3 | 28.0 |
| LnGrp LOS | D | | D | D | | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 275 | | | 236 | | | 1756 | | | 1838 | |
| Approach Delay, s/veh | | 38.1 | | | 37.8 | | | 23.6 | | | 27.1 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 11.5 | 40.6 | | 14.3 | 13.1 | 38.9 | | 14.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 9.7 | 36.1 | | 18.1 | 11.7 | 34.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 7.4 | 21.8 | | 9.0 | 8.8 | 25.2 | | 9.4 |
| Green Ext Time (p_c), s | 0.1 | 9.2 | | 0.8 | 0.1 | 6.7 | | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 27.0 |
| HCM 2010 LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 181 | 173 | 0 | 1137 | 1419 | 907 |
| Future Volume (vph) | 181 | 173 | 0 | 1137 | 1419 | 907 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.96 | 0.85 | | 1.00 | 0.94 | |
| Flt Protected | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3352 | 1441 | | 5085 | 4788 | |
| Flt Permitted | 0.96 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3352 | 1441 | | 5085 | 4788 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 197 | 188 | 0 | 1236 | 1542 | 986 |
| RTOR Reduction (vph) | 31 | 59 | 0 | 0 | 72 | 0 |
| Lane Group Flow (vph) | 232 | 63 | 0 | 1236 | 2456 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 12.8 | 12.8 | | 88.7 | 88.7 | |
| Effective Green, g (s) | 12.8 | 12.8 | | 88.7 | 88.7 | |
| Actuated g/C Ratio | 0.12 | 0.12 | | 0.80 | 0.80 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 388 | 166 | | 4081 | 3843 | |
| v/s Ratio Prot | c0.07 | | | 0.24 | c0.51 | |
| v/s Ratio Perm | | 0.04 | | | | |
| v/c Ratio | 0.60 | 0.38 | | 0.30 | 0.64 | |
| Uniform Delay, d1 | 46.4 | 45.2 | | 2.8 | 4.4 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 2.5 | 1.4 | | 0.2 | 0.8 | |
| Delay (s) | 48.9 | 46.6 | | 3.0 | 5.2 | |
| Level of Service | D | D | | A | A | |
| Approach Delay (s) | 48.2 | | | 3.0 | 5.2 | |
| Approach LOS | D | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 8.6 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.63 | | |
| Actuated Cycle Length (s) | 110.5 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 62.4% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 958 | 290 | 153 | 427 | 0 | 0 | 0 | 0 | 397 | 200 | 162 |
| Future Volume (vph) | 0 | 958 | 290 | 153 | 427 | 0 | 0 | 0 | 0 | 397 | 200 | 162 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.99 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3111 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.98 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 3111 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 1041 | 315 | 166 | 464 | 0 | 0 | 0 | 0 | 432 | 217 | 176 |
| RTOR Reduction (vph) | 0 | 0 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 98 |
| Lane Group Flow (vph) | 0 | 1041 | 110 | 166 | 464 | 0 | 0 | 0 | 0 | 220 | 444 | 60 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 28.3 | 28.3 | 8.6 | 41.4 | | | | | 30.8 | 30.8 | 30.8 |
| Effective Green, g (s) | | 28.3 | 28.3 | 8.6 | 41.4 | | | | | 30.8 | 30.8 | 30.8 |
| Actuated g/C Ratio | | 0.35 | 0.35 | 0.11 | 0.51 | | | | | 0.38 | 0.38 | 0.38 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1772 | 551 | 363 | 1804 | | | | | 610 | 1180 | 546 |
| v/s Ratio Prot | | c0.20 | | c0.05 | 0.13 | | | | | 0.14 | c0.14 | |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.04 |
| v/c Ratio | | 0.59 | 0.20 | 0.46 | 0.26 | | | | | 0.36 | 0.38 | 0.11 |
| Uniform Delay, d1 | | 21.7 | 18.5 | 34.1 | 11.2 | | | | | 18.1 | 18.2 | 16.3 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.2 | 0.9 | 0.1 | | | | | 0.4 | 0.2 | 0.4 |
| Delay (s) | | 22.2 | 18.7 | 35.0 | 11.3 | | | | | 18.5 | 18.4 | 16.7 |
| Level of Service | | C | B | D | B | | | | | B | B | B |
| Approach Delay (s) | | 21.4 | | | 17.6 | | | 0.0 | | | 18.1 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.6 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.47 | | |
| Actuated Cycle Length (s) | 81.2 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 58.2% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 329 | 983 | 0 | 0 | 455 | 267 | 119 | 198 | 570 | 0 | 0 | 0 |
| Future Volume (vph) | 329 | 983 | 0 | 0 | 455 | 267 | 119 | 198 | 570 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.93 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1571 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1571 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 358 | 1068 | 0 | 0 | 495 | 290 | 129 | 215 | 620 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 234 | 0 | 17 | 36 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 358 | 1068 | 0 | 0 | 495 | 56 | 116 | 422 | 373 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 13.2 | 34.5 | | | 16.8 | 16.8 | 43.7 | 43.7 | 43.7 | | | |
| Effective Green, g (s) | 13.2 | 34.5 | | | 16.8 | 16.8 | 43.7 | 43.7 | 43.7 | | | |
| Actuated g/C Ratio | 0.15 | 0.40 | | | 0.19 | 0.19 | 0.50 | 0.50 | 0.50 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 519 | 1400 | | | 681 | 304 | 842 | 787 | 753 | | | |
| v/s Ratio Prot | 0.10 | c0.30 | | | 0.14 | | 0.07 | c0.27 | | | | |
| v/s Ratio Perm | | | | | | 0.04 | | | 0.25 | | | |
| v/c Ratio | 0.69 | 0.76 | | | 0.73 | 0.18 | 0.14 | 0.54 | 0.49 | | | |
| Uniform Delay, d1 | 35.1 | 22.8 | | | 33.0 | 29.5 | 11.7 | 14.8 | 14.4 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 3.8 | 2.5 | | | 3.9 | 0.3 | 0.1 | 0.7 | 2.3 | | | |
| Delay (s) | 38.9 | 25.3 | | | 36.9 | 29.8 | 11.7 | 15.5 | 16.7 | | | |
| Level of Service | D | C | | | D | C | B | B | B | | | |
| Approach Delay (s) | | 28.7 | | | 34.3 | | | 15.6 | | | 0.0 | |
| Approach LOS | | C | | | C | | | B | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.1 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.67 | | |
| Actuated Cycle Length (s) | 87.2 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 58.2% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 94 | 484 | 50 | 13 | 334 | 101 | 38 | 196 | 10 | 103 | 117 | 136 |
| Future Volume (vph) | 94 | 484 | 50 | 13 | 334 | 101 | 38 | 196 | 10 | 103 | 117 | 136 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.99 | | 1.00 | 0.97 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3490 | | 1770 | 3416 | | 1770 | 1849 | | 1770 | 1863 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3490 | | 1770 | 3416 | | 1770 | 1849 | | 1770 | 1863 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 102 | 526 | 54 | 14 | 363 | 110 | 41 | 213 | 11 | 112 | 127 | 148 |
| RTOR Reduction (vph) | 0 | 7 | 0 | 0 | 28 | 0 | 0 | 2 | 0 | 0 | 0 | 122 |
| Lane Group Flow (vph) | 102 | 573 | 0 | 14 | 445 | 0 | 41 | 222 | 0 | 112 | 127 | 26 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | 12.5 | 35.6 | | 10.5 | 33.6 | | 10.3 | 15.9 | | 10.0 | 15.6 | 15.6 |
| Effective Green, g (s) | 12.5 | 35.6 | | 10.5 | 33.6 | | 10.3 | 15.9 | | 10.0 | 15.6 | 15.6 |
| Actuated g/C Ratio | 0.14 | 0.40 | | 0.12 | 0.37 | | 0.11 | 0.18 | | 0.11 | 0.17 | 0.17 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 245 | 1380 | | 206 | 1275 | | 202 | 326 | | 196 | 322 | 274 |
| v/s Ratio Prot | c0.06 | c0.16 | | 0.01 | 0.13 | | 0.02 | c0.12 | | c0.06 | 0.07 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.02 |
| v/c Ratio | 0.42 | 0.42 | | 0.07 | 0.35 | | 0.20 | 0.68 | | 0.57 | 0.39 | 0.09 |
| Uniform Delay, d1 | 35.4 | 19.7 | | 35.4 | 20.3 | | 36.1 | 34.7 | | 38.0 | 33.0 | 31.3 |
| Progression Factor | 1.00 | 1.00 | | 0.77 | 0.61 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 5.1 | 0.9 | | 0.6 | 0.7 | | 0.5 | 5.5 | | 4.0 | 0.8 | 0.1 |
| Delay (s) | 40.6 | 20.6 | | 28.0 | 13.1 | | 36.6 | 40.2 | | 41.9 | 33.8 | 31.4 |
| Level of Service | D | C | | C | B | | D | D | | D | C | C |
| Approach Delay (s) | | 23.6 | | | 13.5 | | | 39.7 | | | 35.2 | |
| Approach LOS | | C | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 25.7 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.51 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 50.8% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 146 | 442 | 13 | 69 | 342 | 115 | 11 | 118 | 168 | 62 | 34 | 101 |
| Future Volume (vph) | 146 | 442 | 13 | 69 | 342 | 115 | 11 | 118 | 168 | 62 | 34 | 101 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.96 | | | 1.00 | 0.85 | 1.00 | 0.89 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3524 | | 1770 | 3406 | | | 1855 | 1583 | 1770 | 1654 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.97 | 1.00 | 0.56 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3524 | | 1770 | 3406 | | | 1799 | 1583 | 1039 | 1654 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 159 | 480 | 14 | 75 | 372 | 125 | 12 | 128 | 183 | 67 | 37 | 110 |
| RTOR Reduction (vph) | 0 | 2 | 0 | 0 | 25 | 0 | 0 | 0 | 158 | 0 | 95 | 0 |
| Lane Group Flow (vph) | 159 | 492 | 0 | 75 | 472 | 0 | 0 | 140 | 25 | 67 | 52 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 15.4 | 56.1 | | 8.0 | 48.7 | | | 12.4 | 12.4 | 12.4 | 12.4 | |
| Effective Green, g (s) | 15.4 | 56.1 | | 8.0 | 48.7 | | | 12.4 | 12.4 | 12.4 | 12.4 | |
| Actuated g/C Ratio | 0.17 | 0.62 | | 0.09 | 0.54 | | | 0.14 | 0.14 | 0.14 | 0.14 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 302 | 2196 | | 157 | 1843 | | | 247 | 218 | 143 | 227 | |
| v/s Ratio Prot | c0.09 | 0.14 | | 0.04 | c0.14 | | | | | | 0.03 | |
| v/s Ratio Perm | | | | | | | | c0.08 | 0.02 | 0.06 | | |
| v/c Ratio | 0.53 | 0.22 | | 0.48 | 0.26 | | | 0.57 | 0.12 | 0.47 | 0.23 | |
| Uniform Delay, d1 | 34.0 | 7.4 | | 39.0 | 11.0 | | | 36.3 | 34.0 | 35.8 | 34.5 | |
| Progression Factor | 1.36 | 0.32 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 1.5 | 0.2 | | 2.3 | 0.3 | | | 3.0 | 0.2 | 2.4 | 0.5 | |
| Delay (s) | 47.7 | 2.6 | | 41.3 | 11.3 | | | 39.3 | 34.2 | 38.2 | 35.1 | |
| Level of Service | D | A | | D | B | | | D | C | D | D | |
| Approach Delay (s) | | 13.6 | | | 15.3 | | | 36.4 | | | 36.0 | |
| Approach LOS | | B | | | B | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 21.0 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.36 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 47.8% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 447 | 441 | 112 | 393 | 0 | 0 | 0 | 0 | 322 | 0 | 181 |
| Future Volume (vph) | 0 | 447 | 441 | 112 | 393 | 0 | 0 | 0 | 0 | 322 | 0 | 181 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.93 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3276 | | 1610 | 3386 | | | | | 1681 | 1681 | 1583 |
| Flt Permitted | | 1.00 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3276 | | 1610 | 3192 | | | | | 1681 | 1681 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 486 | 479 | 122 | 427 | 0 | 0 | 0 | 0 | 350 | 0 | 197 |
| RTOR Reduction (vph) | 0 | 250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 127 |
| Lane Group Flow (vph) | 0 | 715 | 0 | 110 | 439 | 0 | 0 | 0 | 0 | 175 | 175 | 70 |
| Turn Type | | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 20.9 | | 7.8 | 33.2 | | | | | 23.4 | 23.4 | 23.4 |
| Effective Green, g (s) | | 20.9 | | 7.8 | 33.2 | | | | | 23.4 | 23.4 | 23.4 |
| Actuated g/C Ratio | | 0.32 | | 0.12 | 0.51 | | | | | 0.36 | 0.36 | 0.36 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1043 | | 191 | 1638 | | | | | 599 | 599 | 564 |
| v/s Ratio Prot | | c0.22 | | c0.07 | 0.03 | | | | | c0.10 | 0.10 | |
| v/s Ratio Perm | | | | | 0.10 | | | | | | | 0.04 |
| v/c Ratio | | 0.69 | | 0.58 | 0.27 | | | | | 0.29 | 0.29 | 0.12 |
| Uniform Delay, d1 | | 19.5 | | 27.3 | 9.3 | | | | | 15.2 | 15.2 | 14.2 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 1.9 | | 4.2 | 0.1 | | | | | 0.3 | 0.3 | 0.5 |
| Delay (s) | | 21.4 | | 31.5 | 9.3 | | | | | 15.4 | 15.4 | 14.7 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 21.4 | | | 13.8 | | | 0.0 | | | 15.1 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 17.7 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.49 | | |
| Actuated Cycle Length (s) | 65.6 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 57.6% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 266 | 396 | 269 | 139 | 82 | 29 | 169 | 949 | 370 | 55 | 1379 | 216 |
| Future Volume (veh/h) | 266 | 396 | 269 | 139 | 82 | 29 | 169 | 949 | 370 | 55 | 1379 | 216 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 289 | 430 | 292 | 151 | 89 | 32 | 184 | 1032 | 402 | 60 | 1499 | 235 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 761 | 783 | 350 | 242 | 249 | 111 | 252 | 2521 | 785 | 136 | 2350 | 732 |
| Arrive On Green | 0.22 | 0.22 | 0.22 | 0.07 | 0.07 | 0.07 | 0.07 | 0.50 | 0.50 | 0.04 | 0.46 | 0.46 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 289 | 430 | 292 | 151 | 89 | 32 | 184 | 1032 | 402 | 60 | 1499 | 235 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 7.4 | 11.2 | 18.3 | 4.4 | 2.5 | 2.0 | 5.4 | 13.3 | 17.8 | 1.8 | 23.4 | 9.7 |
| Cycle Q Clear(g_c), s | 7.4 | 11.2 | 18.3 | 4.4 | 2.5 | 2.0 | 5.4 | 13.3 | 17.8 | 1.8 | 23.4 | 9.7 |
| 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 | 761 | 783 | 350 | 242 | 249 | 111 | 252 | 2521 | 785 | 136 | 2350 | 732 |
| V/C Ratio(X) | 0.38 | 0.55 | 0.83 | 0.62 | 0.36 | 0.29 | 0.73 | 0.41 | 0.51 | 0.44 | 0.64 | 0.32 |
| Avail Cap(c_a), veh/h | 878 | 903 | 404 | 613 | 630 | 282 | 381 | 2521 | 785 | 182 | 2350 | 732 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 35.9 | 38.6 | 47.0 | 46.1 | 45.8 | 47.1 | 16.6 | 17.7 | 48.8 | 21.3 | 17.6 |
| Incr Delay (d2), s/veh | 0.3 | 0.6 | 12.5 | 2.6 | 0.9 | 1.4 | 4.0 | 0.5 | 2.4 | 2.2 | 1.3 | 1.2 |
| 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 | 3.6 | 5.6 | 9.2 | 2.2 | 1.3 | 0.9 | 2.7 | 6.3 | 8.2 | 0.9 | 11.1 | 4.5 |
| LnGrp Delay(d),s/veh | 34.7 | 36.5 | 51.2 | 49.6 | 46.9 | 47.2 | 51.2 | 17.1 | 20.1 | 51.0 | 22.7 | 18.8 |
| LnGrp LOS | C | D | D | D | D | D | D | B | C | D | C | B |
| Approach Vol, veh/h | | 1011 | | | 272 | | | 1618 | | | 1794 | |
| Approach Delay, s/veh | | 40.2 | | | 48.4 | | | 21.7 | | | 23.1 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 56.0 | | 27.5 | 12.1 | 52.5 | | 11.8 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.5 | 51.5 | | 26.5 | 11.5 | 45.5 | | 18.5 |
| Max Q Clear Time (g_c+I1), s | 3.8 | 19.8 | | 20.3 | 7.4 | 25.4 | | 6.4 |
| Green Ext Time (p_c), s | 0.0 | 11.0 | | 2.7 | 0.2 | 12.1 | | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 27.8 |
| HCM 2010 LOS | C |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 560 | 766 | 964 | 287 | 0 | 1765 |
| Future Volume (veh/h) | 560 | 766 | 964 | 287 | 0 | 1765 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 609 | 833 | 1048 | 312 | 0 | 1918 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1193 | 966 | 2226 | 663 | 0 | 2910 |
| Arrive On Green | 0.35 | 0.35 | 0.57 | 0.57 | 0.00 | 0.57 |
| Sat Flow, veh/h | 3442 | 2787 | 4058 | 1158 | 0 | 5421 |
| Grp Volume(v), veh/h | 609 | 833 | 913 | 447 | 0 | 1918 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1658 | 0 | 1695 |
| Q Serve(g_s), s | 15.6 | 30.9 | 17.5 | 17.5 | 0.0 | 28.7 |
| Cycle Q Clear(g_c), s | 15.6 | 30.9 | 17.5 | 17.5 | 0.0 | 28.7 |
| Prop In Lane | 1.00 | 1.00 | | 0.70 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1193 | 966 | 1940 | 949 | 0 | 2910 |
| V/C Ratio(X) | 0.51 | 0.86 | 0.47 | 0.47 | 0.00 | 0.66 |
| Avail Cap(c_a), veh/h | 1473 | 1193 | 1940 | 949 | 0 | 2910 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.8 | 33.8 | 13.9 | 13.9 | 0.0 | 16.3 |
| Incr Delay (d2), s/veh | 0.3 | 5.6 | 0.8 | 1.7 | 0.0 | 1.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.4 | 12.6 | 8.3 | 8.4 | 0.0 | 13.6 |
| LnGrp Delay(d),s/veh | 29.1 | 39.4 | 14.7 | 15.6 | 0.0 | 17.5 |
| LnGrp LOS | C | D | B | B | | B |
| Approach Vol, veh/h | 1442 | | 1360 | | | 1918 |
| Approach Delay, s/veh | 35.1 | | 15.0 | | | 17.5 |
| Approach LOS | D | | B | | | B |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 68.0 | | | | 68.0 | | 43.0 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.5 | | | | 63.5 | | 47.5 |
| Max Q Clear Time (g_c+I1), s | | 19.5 | | | | 30.7 | | 32.9 |
| Green Ext Time (p_c), s | | 13.5 | | | | 20.0 | | 5.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.1 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 431 | 983 | 73 | 28 | 506 | 115 | 153 | 100 | 45 | 133 | 64 | 78 |
| Future Volume (veh/h) | 431 | 983 | 73 | 28 | 506 | 115 | 153 | 100 | 45 | 133 | 64 | 78 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 468 | 1068 | 79 | 30 | 550 | 125 | 166 | 109 | 49 | 145 | 70 | 85 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 1638 | 121 | 52 | 658 | 149 | 255 | 397 | 178 | 310 | 137 | 516 |
| Arrive On Green | 0.29 | 0.49 | 0.49 | 0.03 | 0.23 | 0.23 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 3342 | 247 | 1774 | 2868 | 650 | 1227 | 1218 | 548 | 740 | 420 | 1583 |
| Grp Volume(v), veh/h | 468 | 565 | 582 | 30 | 339 | 336 | 166 | 0 | 158 | 215 | 0 | 85 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1819 | 1774 | 1770 | 1748 | 1227 | 0 | 1766 | 1161 | 0 | 1583 |
| Q Serve(g_s), s | 22.2 | 20.9 | 21.0 | 1.5 | 15.9 | 16.1 | 11.8 | 0.0 | 5.8 | 10.4 | 0.0 | 3.3 |
| Cycle Q Clear(g_c), s | 22.2 | 20.9 | 21.0 | 1.5 | 15.9 | 16.1 | 28.0 | 0.0 | 5.8 | 16.2 | 0.0 | 3.3 |
| Prop In Lane | 1.00 | | 0.14 | 1.00 | | 0.37 | 1.00 | | 0.31 | 0.67 | | 1.00 |
| Lane Grp Cap(c), veh/h | 515 | 867 | 892 | 52 | 406 | 401 | 255 | 0 | 576 | 447 | 0 | 516 |
| V/C Ratio(X) | 0.91 | 0.65 | 0.65 | 0.57 | 0.83 | 0.84 | 0.65 | 0.00 | 0.27 | 0.48 | 0.00 | 0.16 |
| Avail Cap(c_a), veh/h | 700 | 1054 | 1084 | 120 | 476 | 470 | 255 | 0 | 576 | 447 | 0 | 516 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.9 | 16.7 | 16.7 | 41.9 | 32.1 | 32.2 | 37.4 | 0.0 | 21.8 | 26.8 | 0.0 | 21.0 |
| Incr Delay (d2), s/veh | 12.7 | 1.1 | 1.0 | 9.4 | 10.7 | 11.3 | 12.3 | 0.0 | 1.2 | 3.7 | 0.0 | 0.7 |
| 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 | 12.6 | 10.5 | 10.8 | 0.9 | 9.0 | 9.0 | 4.8 | 0.0 | 3.0 | 4.9 | 0.0 | 1.6 |
| LnGrp Delay(d),s/veh | 42.6 | 17.8 | 17.7 | 51.3 | 42.9 | 43.4 | 49.7 | 0.0 | 23.0 | 30.5 | 0.0 | 21.7 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | C |
| Approach Vol, veh/h | | 1615 | | | 705 | | | 324 | | | 300 | |
| Approach Delay, s/veh | | 24.9 | | | 43.5 | | | 36.7 | | | 28.0 | |
| Approach LOS | | C | | | D | | | D | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 33.0 | 7.1 | 47.4 | | 33.0 | 29.9 | 24.5 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 28.5 | 5.9 | 52.1 | | 28.5 | 34.5 | 23.5 |
| Max Q Clear Time (g_c+I1), s | | 30.0 | 3.5 | 23.0 | | 18.2 | 24.2 | 18.1 |
| Green Ext Time (p_c), s | | 0.0 | 0.0 | 9.2 | | 1.1 | 1.2 | 2.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 31.0 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 60 | 873 | 52 | 22 | 582 | 22 | 80 | 25 | 77 | 16 | 2 | 13 |
| Future Volume (veh/h) | 60 | 873 | 52 | 22 | 582 | 22 | 80 | 25 | 77 | 16 | 2 | 13 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 65 | 949 | 57 | 24 | 633 | 24 | 87 | 27 | 84 | 17 | 2 | 14 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 84 | 1115 | 67 | 45 | 1066 | 40 | 174 | 54 | 168 | 367 | 386 | 328 |
| Arrive On Green | 0.05 | 0.33 | 0.33 | 0.03 | 0.31 | 0.31 | 0.23 | 0.23 | 0.23 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3393 | 204 | 1774 | 3477 | 132 | 746 | 232 | 720 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 65 | 495 | 511 | 24 | 322 | 335 | 198 | 0 | 0 | 17 | 2 | 14 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1827 | 1774 | 1770 | 1839 | 1698 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 3.2 | 22.8 | 22.8 | 1.2 | 13.5 | 13.5 | 8.8 | 0.0 | 0.0 | 0.7 | 0.1 | 0.6 |
| Cycle Q Clear(g_c), s | 3.2 | 22.8 | 22.8 | 1.2 | 13.5 | 13.5 | 8.8 | 0.0 | 0.0 | 0.7 | 0.1 | 0.6 |
| Prop In Lane | 1.00 | | 0.11 | 1.00 | | 0.07 | 0.44 | | 0.42 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 84 | 582 | 600 | 45 | 543 | 564 | 396 | 0 | 0 | 367 | 386 | 328 |
| V/C Ratio(X) | 0.78 | 0.85 | 0.85 | 0.54 | 0.59 | 0.59 | 0.50 | 0.00 | 0.00 | 0.05 | 0.01 | 0.04 |
| Avail Cap(c_a), veh/h | 185 | 664 | 685 | 116 | 595 | 618 | 396 | 0 | 0 | 367 | 386 | 328 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 41.2 | 27.4 | 27.4 | 42.1 | 25.7 | 25.7 | 29.1 | 0.0 | 0.0 | 27.8 | 27.5 | 27.7 |
| Incr Delay (d2), s/veh | 14.1 | 9.3 | 9.1 | 9.6 | 1.3 | 1.3 | 4.5 | 0.0 | 0.0 | 0.2 | 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 | 1.9 | 12.6 | 13.0 | 0.7 | 6.7 | 7.0 | 4.6 | 0.0 | 0.0 | 0.4 | 0.0 | 0.3 |
| LnGrp Delay(d),s/veh | 55.3 | 36.7 | 36.4 | 51.7 | 27.0 | 27.0 | 33.5 | 0.0 | 0.0 | 28.0 | 27.6 | 28.0 |
| LnGrp LOS | E | D | D | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 1071 | | | 681 | | | 198 | | | 33 | |
| Approach Delay, s/veh | | 37.7 | | | 27.9 | | | 33.5 | | | 28.0 | |
| Approach LOS | | D | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 24.9 | 6.7 | 33.2 | | 22.6 | 8.6 | 31.3 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 20.4 | 5.7 | 32.8 | | 18.1 | 9.1 | 29.4 |
| Max Q Clear Time (g_c+I1), s | | 10.8 | 3.2 | 24.8 | | 2.7 | 5.2 | 15.5 |
| Green Ext Time (p_c), s | | 0.7 | 0.0 | 3.9 | | 0.0 | 0.0 | 3.5 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.8 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 205 | 462 | 229 | 236 | 260 | 130 | 220 | 1172 | 151 | 213 | 816 | 98 |
| Future Volume (veh/h) | 205 | 462 | 229 | 236 | 260 | 130 | 220 | 1172 | 151 | 213 | 816 | 98 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 223 | 502 | 249 | 257 | 283 | 141 | 239 | 1274 | 164 | 232 | 887 | 107 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 252 | 666 | 298 | 384 | 366 | 177 | 293 | 2374 | 739 | 287 | 2365 | 736 |
| Arrive On Green | 0.14 | 0.19 | 0.19 | 0.11 | 0.16 | 0.16 | 0.09 | 0.47 | 0.47 | 0.08 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2312 | 1122 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 223 | 502 | 249 | 257 | 215 | 209 | 239 | 1274 | 164 | 232 | 887 | 107 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1665 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 14.8 | 16.1 | 14.6 | 8.6 | 14.0 | 14.5 | 8.2 | 21.4 | 4.8 | 8.0 | 13.6 | 2.8 |
| Cycle Q Clear(g_c), s | 14.8 | 16.1 | 14.6 | 8.6 | 14.0 | 14.5 | 8.2 | 21.4 | 4.8 | 8.0 | 13.6 | 2.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.67 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 252 | 666 | 298 | 384 | 280 | 263 | 293 | 2374 | 739 | 287 | 2365 | 736 |
| V/C Ratio(X) | 0.89 | 0.75 | 0.84 | 0.67 | 0.77 | 0.79 | 0.82 | 0.54 | 0.22 | 0.81 | 0.38 | 0.15 |
| Avail Cap(c_a), veh/h | 303 | 1304 | 583 | 384 | 524 | 492 | 301 | 2374 | 739 | 301 | 2365 | 736 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.51 | 0.51 | 0.51 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 0.72 | 0.72 | 0.72 |
| Uniform Delay (d), s/veh | 50.5 | 46.1 | 30.2 | 51.2 | 48.4 | 48.6 | 54.0 | 22.8 | 8.0 | 54.1 | 20.8 | 6.5 |
| Incr Delay (d2), s/veh | 13.3 | 0.9 | 3.3 | 4.2 | 4.2 | 5.1 | 15.5 | 0.9 | 0.7 | 11.0 | 0.3 | 0.3 |
| 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 | 8.2 | 8.0 | 6.9 | 4.3 | 7.1 | 7.1 | 4.5 | 10.2 | 3.0 | 4.2 | 6.4 | 1.9 |
| LnGrp Delay(d),s/veh | 63.9 | 47.0 | 33.5 | 55.4 | 52.6 | 53.8 | 69.5 | 23.6 | 8.7 | 65.0 | 21.1 | 6.8 |
| LnGrp LOS | E | D | C | E | D | D | E | C | A | E | C | A |
| Approach Vol, veh/h | | 974 | | | 681 | | | 1677 | | | 1226 | |
| Approach Delay, s/veh | | 47.4 | | | 54.0 | | | 28.7 | | | 28.2 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 21.5 | 23.5 | 14.5 | 60.5 | 17.9 | 27.1 | 14.7 | 60.3 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 35.5 | 10.5 | 35.5 | 11.8 | 44.2 | 10.5 | 35.5 |
| Max Q Clear Time (g_c+I1), s | 16.8 | 16.5 | 10.0 | 23.4 | 10.6 | 18.1 | 10.2 | 15.6 |
| Green Ext Time (p_c), s | 0.2 | 2.5 | 0.0 | 7.3 | 0.1 | 4.5 | 0.0 | 6.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 36.3 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 279 | 502 | 0 | 0 | 153 | 146 | 306 | 4 | 0 | 50 | 0 | 46 |
| Future Volume (veh/h) | 279 | 502 | 0 | 0 | 153 | 146 | 306 | 4 | 0 | 50 | 0 | 46 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 303 | 546 | 0 | 0 | 166 | 159 | 333 | 4 | 0 | 54 | 0 | 50 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 440 | 675 | 0 | 0 | 532 | 248 | 0 | 660 | 0 | 89 | 0 | 0 |
| Arrive On Green | 0.13 | 0.36 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.35 | 0.00 | 0.05 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 54 | |
| Grp Volume(v), veh/h | 303 | 546 | 0 | 0 | 166 | 159 | 0 | 4 | 0 | 54 | 33.5 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | C | |
| Q Serve(g_s), s | 4.9 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Cycle Q Clear(g_c), s | 4.9 | 15.3 | 0.0 | 0.0 | 2.5 | 5.4 | 0.0 | 0.1 | 0.0 | 1.7 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 440 | 675 | 0 | 0 | 532 | 248 | 0 | 660 | 0 | 89 | | |
| V/C Ratio(X) | 0.69 | 0.81 | 0.00 | 0.00 | 0.31 | 0.64 | 0.00 | 0.01 | 0.00 | 0.61 | | |
| Avail Cap(c_a), veh/h | 803 | 1239 | 0 | 0 | 1201 | 561 | 0 | 660 | 0 | 230 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 24.1 | 16.6 | 0.0 | 0.0 | 21.6 | 22.9 | 0.0 | 12.1 | 0.0 | 26.9 | | |
| Incr Delay (d2), s/veh | 1.9 | 2.4 | 0.0 | 0.0 | 0.3 | 2.7 | 0.0 | 0.0 | 0.0 | 6.5 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 2.4 | 8.2 | 0.0 | 0.0 | 1.2 | 2.6 | 0.0 | 0.0 | 0.0 | 1.0 | | |
| LnGrp Delay(d),s/veh | 26.1 | 19.0 | 0.0 | 0.0 | 22.0 | 25.6 | 0.0 | 12.1 | 0.0 | 33.5 | | |
| LnGrp LOS | C | B | | | C | C | | B | | C | | |
| Approach Vol, veh/h | | 849 | | | 325 | | | 4 | | | | |
| Approach Delay, s/veh | | 21.5 | | | 23.7 | | | 12.1 | | | | |
| Approach LOS | | C | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 7.4 | 25.0 | | 25.5 | 0.0 | | 11.9 | 13.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 20.5 | | 38.5 | 5.0 | | 13.5 | 20.5 |
| Max Q Clear Time (g_c+I1), s | 3.7 | 2.1 | | 17.3 | 0.0 | | 6.9 | 7.4 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 3.6 | 0.0 | | 0.6 | 1.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.6 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.2 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 33 | 67 | 12 | 21 | 48 | 45 | 5 | 98 | 4 | 16 | 45 | 6 |
| Future Vol, veh/h | 33 | 67 | 12 | 21 | 48 | 45 | 5 | 98 | 4 | 16 | 45 | 6 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 36 | 73 | 13 | 23 | 52 | 49 | 5 | 107 | 4 | 17 | 49 | 7 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.3 | 8.1 | 8.4 | 8.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 29% | 18% | 24% |
| Vol Thru, % | 92% | 60% | 42% | 67% |
| Vol Right, % | 4% | 11% | 39% | 9% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 107 | 112 | 114 | 67 |
| LT Vol | 5 | 33 | 21 | 16 |
| Through Vol | 98 | 67 | 48 | 45 |
| RT Vol | 4 | 12 | 45 | 6 |
| Lane Flow Rate | 116 | 122 | 124 | 73 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.147 | 0.153 | 0.149 | 0.093 |
| Departure Headway (Hd) | 4.563 | 4.51 | 4.318 | 4.621 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 786 | 796 | 831 | 776 |
| Service Time | 2.589 | 2.531 | 2.339 | 2.649 |
| HCM Lane V/C Ratio | 0.148 | 0.153 | 0.149 | 0.094 |
| HCM Control Delay | 8.4 | 8.3 | 8.1 | 8.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.5 | 0.5 | 0.5 | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 56 | 13 | 15 | 98 | 2 | 12 | 4 | 52 | 0 | 6 | 1 |
| Future Vol, veh/h | 0 | 56 | 13 | 15 | 98 | 2 | 12 | 4 | 52 | 0 | 6 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 61 | 14 | 16 | 107 | 2 | 13 | 4 | 57 | 0 | 7 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 109 | 0 | 0 | 75 | 0 | 0 | 212 | 209 | 68 | 239 | 215 | 108 |
| Stage 1 | - | - | - | - | - | - | 68 | 68 | - | 140 | 140 | - |
| Stage 2 | - | - | - | - | - | - | 144 | 141 | - | 99 | 75 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1481 | - | - | 1524 | - | - | 745 | 688 | 995 | 715 | 683 | 946 |
| Stage 1 | - | - | - | - | - | - | 942 | 838 | - | 863 | 781 | - |
| Stage 2 | - | - | - | - | - | - | 859 | 780 | - | 907 | 833 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1481 | - | - | 1524 | - | - | 732 | 680 | 995 | 666 | 675 | 946 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 732 | 680 | - | 666 | 675 | - |
| Stage 1 | - | - | - | - | - | - | 942 | 838 | - | 863 | 772 | - |
| Stage 2 | - | - | - | - | - | - | 841 | 771 | - | 851 | 833 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 1 | 9.3 | 10.2 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 912 | 1481 | - | - | 1524 | - | - | 704 |
| HCM Lane V/C Ratio | 0.081 | - | - | - | 0.011 | - | - | 0.011 |
| HCM Control Delay (s) | 9.3 | 0 | - | - | 7.4 | 0 | - | 10.2 |
| HCM Lane LOS | A | A | - | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.3 | 0 | - | - | 0 | - | - | 0 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 112 | 2 | 10 | 110 | 6 | 6 | 0 | 26 | 0 | 0 | 0 |
| Future Vol, veh/h | 2 | 112 | 2 | 10 | 110 | 6 | 6 | 0 | 26 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 122 | 2 | 11 | 120 | 7 | 7 | 0 | 28 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 127 | 0 | 0 | 124 | 0 | 0 | 273 | 276 | 123 |
| Stage 1 | - | - | - | - | - | - | 127 | 127 | - |
| Stage 2 | - | - | - | - | - | - | 146 | 149 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 6.42 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1459 | - | - | 1463 | - | - | 716 | 632 | 928 |
| Stage 1 | - | - | - | - | - | - | 899 | 791 | - |
| Stage 2 | - | - | - | - | - | - | 881 | 774 | - |
| Platoon blocked, % | | - | - | | - | - | | | |
| Mov Cap-1 Maneuver | 1459 | - | - | 1463 | - | - | 710 | 0 | 928 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 710 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 898 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 874 | 0 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.6 | 9.3 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 877 | 1459 | - | - | 1463 | - | - |
| HCM Lane V/C Ratio | 0.04 | 0.001 | - | - | 0.007 | - | - |
| HCM Control Delay (s) | 9.3 | 7.5 | 0 | - | 7.5 | 0 | - |
| HCM Lane LOS | A | A | A | - | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 67 | 70 | 75 | 1513 | 1350 | 52 |
| Future Volume (veh/h) | 67 | 70 | 75 | 1513 | 1350 | 52 |
| Number | 7 | 14 | 5 | 2 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 73 | 76 | 82 | 1645 | 1467 | 57 |
| Adj No. of Lanes | 1 | 1 | 1 | 3 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 164 | 146 | 125 | 3624 | 2737 | 106 |
| Arrive On Green | 0.09 | 0.09 | 0.07 | 0.71 | 0.54 | 0.54 |
| Sat Flow, veh/h | 1774 | 1583 | 1774 | 5253 | 5191 | 195 |
| Grp Volume(v), veh/h | 73 | 76 | 82 | 1645 | 990 | 534 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1583 | 1774 | 1695 | 1695 | 1828 |
| Q Serve(g_s), s | 1.8 | 2.1 | 2.1 | 6.3 | 8.7 | 8.7 |
| Cycle Q Clear(g_c), s | 1.8 | 2.1 | 2.1 | 6.3 | 8.7 | 8.7 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.11 |
| Lane Grp Cap(c), veh/h | 164 | 146 | 125 | 3624 | 1847 | 996 |
| V/C Ratio(X) | 0.45 | 0.52 | 0.66 | 0.45 | 0.54 | 0.54 |
| Avail Cap(c_a), veh/h | 696 | 621 | 250 | 3624 | 1847 | 996 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.8 | 20.0 | 20.9 | 2.8 | 6.8 | 6.8 |
| Incr Delay (d2), s/veh | 1.9 | 2.8 | 5.7 | 0.4 | 1.1 | 2.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 2.0 | 1.2 | 3.0 | 4.3 | 4.9 |
| LnGrp Delay(d),s/veh | 21.7 | 22.8 | 26.6 | 3.2 | 7.9 | 8.8 |
| LnGrp LOS | C | C | C | A | A | A |
| Approach Vol, veh/h | 149 | | | 1727 | 1524 | |
| Approach Delay, s/veh | 22.3 | | | 4.3 | 8.2 | |
| Approach LOS | C | | | A | A | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | 5 | 6 | | |
| Phs Duration (G+Y+Rc), s | | 37.4 | | 8.8 | 7.8 | 29.6 | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | 4.5 | 4.5 | | |
| Max Green Setting (Gmax), s | | 32.9 | | 18.1 | 6.5 | 21.9 | | |
| Max Q Clear Time (g_c+I1), s | | 8.3 | | 4.1 | 4.1 | 10.7 | | |
| Green Ext Time (p_c), s | | 14.0 | | 0.3 | 0.0 | 7.4 | | |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 6.9 |
| HCM 2010 LOS | A |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 18 | 16 | 22 | 24 | 8 | 18 | 7 |
| Future Vol, veh/h | 39 | 65 | 31 | 22 | 33 | 18 | 16 | 22 | 24 | 8 | 18 | 7 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 71 | 34 | 24 | 36 | 20 | 17 | 24 | 26 | 9 | 20 | 8 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8 | 7.7 | 7.7 | 7.6 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 26% | 29% | 30% | 24% |
| Vol Thru, % | 35% | 48% | 45% | 55% |
| Vol Right, % | 39% | 23% | 25% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 62 | 135 | 73 | 33 |
| LT Vol | 16 | 39 | 22 | 8 |
| Through Vol | 22 | 65 | 33 | 18 |
| RT Vol | 24 | 31 | 18 | 7 |
| Lane Flow Rate | 67 | 147 | 79 | 36 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.08 | 0.167 | 0.091 | 0.044 |
| Departure Headway (Hd) | 4.289 | 4.095 | 4.139 | 4.425 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 840 | 864 | 851 | 814 |
| Service Time | 2.29 | 2.175 | 2.235 | 2.427 |
| HCM Lane V/C Ratio | 0.08 | 0.17 | 0.093 | 0.044 |
| HCM Control Delay | 7.7 | 8 | 7.7 | 7.6 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.6 | 0.3 | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 109 | 82 | 1421 | 37 | 181 | 1174 |
| Future Volume (veh/h) | 109 | 82 | 1421 | 37 | 181 | 1174 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 118 | 89 | 1545 | 40 | 197 | 1276 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 140 | 106 | 3809 | 99 | 290 | 3799 |
| Arrive On Green | 0.15 | 0.15 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 957 | 722 | 5265 | 132 | 321 | 5253 |
| Grp Volume(v), veh/h | 208 | 0 | 1027 | 558 | 197 | 1276 |
| Grp Sat Flow(s),veh/h/ln | 1687 | 0 | 1695 | 1839 | 321 | 1695 |
| Q Serve(g_s), s | 10.1 | 0.0 | 9.3 | 9.3 | 48.6 | 7.1 |
| Cycle Q Clear(g_c), s | 10.1 | 0.0 | 9.3 | 9.3 | 57.9 | 7.1 |
| Prop In Lane | 0.57 | 0.43 | | 0.07 | 1.00 | |
| Lane Grp Cap(c), veh/h | 247 | 0 | 2533 | 1374 | 290 | 3799 |
| V/C Ratio(X) | 0.84 | 0.00 | 0.41 | 0.41 | 0.68 | 0.34 |
| Avail Cap(c_a), veh/h | 360 | 0 | 2533 | 1374 | 290 | 3799 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.1 | 0.0 | 3.9 | 3.9 | 14.4 | 3.6 |
| Incr Delay (d2), s/veh | 11.4 | 0.0 | 0.5 | 0.9 | 12.1 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.5 | 0.0 | 4.5 | 5.0 | 5.2 | 3.4 |
| LnGrp Delay(d),s/veh | 46.5 | 0.0 | 4.4 | 4.8 | 26.5 | 3.8 |
| LnGrp LOS | D | | A | A | C | A |
| Approach Vol, veh/h | 208 | | 1585 | | | 1473 |
| Approach Delay, s/veh | 46.5 | | 4.5 | | | 6.9 |
| Approach LOS | D | | A | | | A |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 67.5 | | | | 67.5 | | 16.8 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 63.0 | | | | 63.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 11.3 | | | | 59.9 | | 12.1 |
| Green Ext Time (p_c), s | | 17.3 | | | | 2.7 | | 0.3 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 8.2 |
| HCM 2010 LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1227 | 13 | 50 | 1085 | 149 |
| Future Volume (veh/h) | 142 | 78 | 123 | 53 | 92 | 16 | 125 | 1227 | 13 | 50 | 1085 | 149 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 154 | 85 | 134 | 58 | 100 | 17 | 136 | 1334 | 14 | 54 | 1179 | 162 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 196 | 108 | 267 | 78 | 134 | 183 | 172 | 2192 | 23 | 81 | 1679 | 231 |
| Arrive On Green | 0.17 | 0.17 | 0.17 | 0.12 | 0.12 | 0.12 | 0.10 | 0.42 | 0.42 | 0.05 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1163 | 642 | 1583 | 671 | 1158 | 1583 | 1774 | 5189 | 54 | 1774 | 4522 | 621 |
| Grp Volume(v), veh/h | 239 | 0 | 134 | 158 | 0 | 17 | 136 | 872 | 476 | 54 | 884 | 457 |
| Grp Sat Flow(s),veh/h/ln | 1805 | 0 | 1583 | 1829 | 0 | 1583 | 1774 | 1695 | 1853 | 1774 | 1695 | 1753 |
| Q Serve(g_s), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 14.5 | 14.5 | 2.2 | 16.1 | 16.1 |
| Cycle Q Clear(g_c), s | 9.2 | 0.0 | 5.6 | 6.1 | 0.0 | 0.7 | 5.4 | 14.5 | 14.5 | 2.2 | 16.1 | 16.1 |
| Prop In Lane | 0.64 | | 1.00 | 0.37 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 0.35 |
| Lane Grp Cap(c), veh/h | 304 | 0 | 267 | 211 | 0 | 183 | 172 | 1432 | 783 | 81 | 1259 | 651 |
| V/C Ratio(X) | 0.79 | 0.00 | 0.50 | 0.75 | 0.00 | 0.09 | 0.79 | 0.61 | 0.61 | 0.67 | 0.70 | 0.70 |
| Avail Cap(c_a), veh/h | 449 | 0 | 394 | 456 | 0 | 394 | 237 | 1432 | 783 | 125 | 1259 | 651 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.9 | 0.0 | 27.4 | 31.1 | 0.0 | 28.7 | 32.1 | 16.3 | 16.3 | 34.1 | 19.4 | 19.4 |
| Incr Delay (d2), s/veh | 5.4 | 0.0 | 1.5 | 5.2 | 0.0 | 0.2 | 11.8 | 1.9 | 3.5 | 9.0 | 3.3 | 6.2 |
| 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 | 5.0 | 0.0 | 2.5 | 3.4 | 0.0 | 0.3 | 3.2 | 7.2 | 8.2 | 1.3 | 8.1 | 8.9 |
| LnGrp Delay(d),s/veh | 34.4 | 0.0 | 28.9 | 36.3 | 0.0 | 28.9 | 43.9 | 18.2 | 19.8 | 43.2 | 22.7 | 25.7 |
| LnGrp LOS | C | | C | D | | C | D | B | B | D | C | C |
| Approach Vol, veh/h | | 373 | | | 175 | | | 1484 | | | 1395 | |
| Approach Delay, s/veh | | 32.4 | | | 35.6 | | | 21.1 | | | 24.5 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 7.8 | 35.2 | | 16.8 | 11.5 | 31.5 | | 12.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 5.1 | 30.7 | | 18.1 | 9.7 | 26.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 4.2 | 16.5 | | 11.2 | 7.4 | 18.1 | | 8.1 |
| Green Ext Time (p_c), s | 0.0 | 7.7 | | 1.0 | 0.1 | 5.1 | | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 24.4 |
| HCM 2010 LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 265 | 418 | 0 | 1723 | 1501 | 729 |
| Future Volume (vph) | 265 | 418 | 0 | 1723 | 1501 | 729 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 0.97 | 0.91 | | 0.91 | 0.91 | |
| Frt | 0.94 | 0.85 | | 1.00 | 0.95 | |
| Flt Protected | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (prot) | 3287 | 1441 | | 5085 | 4836 | |
| Flt Permitted | 0.97 | 1.00 | | 1.00 | 1.00 | |
| Satd. Flow (perm) | 3287 | 1441 | | 5085 | 4836 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 288 | 454 | 0 | 1873 | 1632 | 792 |
| RTOR Reduction (vph) | 35 | 35 | 0 | 0 | 46 | 0 |
| Lane Group Flow (vph) | 471 | 201 | 0 | 1873 | 2378 | 0 |
| Turn Type | Prot | Perm | | NA | NA | |
| Protected Phases | 4 | | | 2 | 6 | |
| Permitted Phases | | 4 | | | | |
| Actuated Green, G (s) | 25.7 | 25.7 | | 101.7 | 101.7 | |
| Effective Green, g (s) | 25.7 | 25.7 | | 101.7 | 101.7 | |
| Actuated g/C Ratio | 0.19 | 0.19 | | 0.75 | 0.75 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 619 | 271 | | 3791 | 3605 | |
| v/s Ratio Prot | c0.14 | | | 0.37 | c0.49 | |
| v/s Ratio Perm | | 0.14 | | | | |
| v/c Ratio | 0.76 | 0.74 | | 0.49 | 0.66 | |
| Uniform Delay, d1 | 52.4 | 52.2 | | 7.0 | 8.7 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 5.5 | 10.4 | | 0.5 | 1.0 | |
| Delay (s) | 57.9 | 62.7 | | 7.5 | 9.6 | |
| Level of Service | E | E | | A | A | |
| Approach Delay (s) | 59.4 | | | 7.5 | 9.6 | |
| Approach LOS | E | | | A | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 16.2 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.68 | | |
| Actuated Cycle Length (s) | 136.4 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 70.1% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 532 | 163 | 446 | 789 | 0 | 0 | 0 | 0 | 226 | 101 | 308 |
| Future Volume (vph) | 0 | 532 | 163 | 446 | 789 | 0 | 0 | 0 | 0 | 226 | 101 | 308 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.91 | 1.00 | 0.97 | 0.95 | | | | | 0.91 | 0.86 | 0.91 |
| Frt | | 1.00 | 0.85 | 1.00 | 1.00 | | | | | 1.00 | 0.93 | 0.85 |
| Flt Protected | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (prot) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2941 | 1441 |
| Flt Permitted | | 1.00 | 1.00 | 0.95 | 1.00 | | | | | 0.95 | 0.99 | 1.00 |
| Satd. Flow (perm) | | 5085 | 1583 | 3433 | 3539 | | | | | 1610 | 2941 | 1441 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 578 | 177 | 485 | 858 | 0 | 0 | 0 | 0 | 246 | 110 | 335 |
| RTOR Reduction (vph) | 0 | 0 | 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 96 |
| Lane Group Flow (vph) | 0 | 578 | 37 | 485 | 858 | 0 | 0 | 0 | 0 | 180 | 248 | 71 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | | | 4 | | | | | | | | | 6 |
| Actuated Green, G (s) | | 15.5 | 15.5 | 15.6 | 35.6 | | | | | 28.8 | 28.8 | 28.8 |
| Effective Green, g (s) | | 15.5 | 15.5 | 15.6 | 35.6 | | | | | 28.8 | 28.8 | 28.8 |
| Actuated g/C Ratio | | 0.21 | 0.21 | 0.21 | 0.49 | | | | | 0.39 | 0.39 | 0.39 |
| Clearance Time (s) | | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | 3.0 | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 1073 | 334 | 729 | 1716 | | | | | 631 | 1153 | 565 |
| v/s Ratio Prot | | 0.11 | | c0.14 | c0.24 | | | | | c0.11 | 0.08 | |
| v/s Ratio Perm | | | 0.02 | | | | | | | | | 0.05 |
| v/c Ratio | | 0.54 | 0.11 | 0.67 | 0.50 | | | | | 0.29 | 0.22 | 0.13 |
| Uniform Delay, d1 | | 25.8 | 23.4 | 26.5 | 12.8 | | | | | 15.3 | 14.8 | 14.3 |
| Progression Factor | | 1.00 | 1.00 | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 0.5 | 0.1 | 2.3 | 0.2 | | | | | 0.3 | 0.1 | 0.5 |
| Delay (s) | | 26.3 | 23.5 | 28.8 | 13.1 | | | | | 15.5 | 14.9 | 14.7 |
| Level of Service | | C | C | C | B | | | | | B | B | B |
| Approach Delay (s) | | 25.6 | | | 18.8 | | | 0.0 | | | 15.0 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.7 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.46 | | |
| Actuated Cycle Length (s) | 73.4 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 71.3% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 205 | 568 | 0 | 0 | 997 | 552 | 253 | 377 | 305 | 0 | 0 | 0 |
| Future Volume (vph) | 205 | 568 | 0 | 0 | 997 | 552 | 253 | 377 | 305 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Lane Util. Factor | 0.97 | 0.95 | | | 0.95 | 1.00 | 0.95 | 0.91 | 0.95 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | 1.00 | 0.99 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (prot) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1672 | 1504 | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | | |
| Satd. Flow (perm) | 3433 | 3539 | | | 3539 | 1583 | 1681 | 1672 | 1504 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 223 | 617 | 0 | 0 | 1084 | 600 | 275 | 410 | 332 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 3 | 134 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 223 | 617 | 0 | 0 | 1084 | 526 | 247 | 468 | 165 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | NA | Perm | | | |
| Protected Phases | 7 | 4 | | | 8 | | 5 | 2 | | | | |
| Permitted Phases | | | | | | 8 | | | 2 | | | |
| Actuated Green, G (s) | 9.7 | 51.6 | | | 37.4 | 37.4 | 24.7 | 24.7 | 24.7 | | | |
| Effective Green, g (s) | 9.7 | 51.6 | | | 37.4 | 37.4 | 24.7 | 24.7 | 24.7 | | | |
| Actuated g/C Ratio | 0.11 | 0.60 | | | 0.44 | 0.44 | 0.29 | 0.29 | 0.29 | | | |
| Clearance Time (s) | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 390 | 2140 | | | 1551 | 694 | 486 | 484 | 435 | | | |
| v/s Ratio Prot | c0.06 | 0.17 | | | 0.31 | | 0.15 | c0.28 | | | | |
| v/s Ratio Perm | | | | | | c0.33 | | | 0.11 | | | |
| v/c Ratio | 0.57 | 0.29 | | | 0.70 | 0.76 | 0.51 | 0.97 | 0.38 | | | |
| Uniform Delay, d1 | 35.8 | 8.1 | | | 19.4 | 20.2 | 25.2 | 29.9 | 24.2 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 2.0 | 0.1 | | | 1.4 | 4.8 | 0.8 | 32.3 | 2.5 | | | |
| Delay (s) | 37.9 | 8.1 | | | 20.8 | 24.9 | 26.1 | 62.2 | 26.7 | | | |
| Level of Service | D | A | | | C | C | C | E | C | | | |
| Approach Delay (s) | | 16.0 | | | 22.3 | | | 43.0 | | | 0.0 | |
| Approach LOS | | B | | | C | | | D | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.7 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.80 | | |
| Actuated Cycle Length (s) | 85.3 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 71.3% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 91 | 322 | 107 | 28 | 730 | 224 | 48 | 223 | 8 | 159 | 269 | 220 |
| Future Volume (vph) | 91 | 322 | 107 | 28 | 730 | 224 | 48 | 223 | 8 | 159 | 269 | 220 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3407 | | 1770 | 3415 | | 1770 | 1853 | | 1770 | 1863 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3407 | | 1770 | 3415 | | 1770 | 1853 | | 1770 | 1863 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 99 | 350 | 116 | 30 | 793 | 243 | 52 | 242 | 9 | 173 | 292 | 239 |
| RTOR Reduction (vph) | 0 | 35 | 0 | 0 | 34 | 0 | 0 | 1 | 0 | 0 | 0 | 162 |
| Lane Group Flow (vph) | 99 | 431 | 0 | 30 | 1002 | 0 | 52 | 250 | 0 | 173 | 292 | 77 |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | | | | | | | | | | | | 6 |
| Actuated Green, G (s) | 8.9 | 24.9 | | 11.3 | 27.3 | | 6.9 | 22.9 | | 12.9 | 28.9 | 28.9 |
| Effective Green, g (s) | 8.9 | 24.9 | | 11.3 | 27.3 | | 6.9 | 22.9 | | 12.9 | 28.9 | 28.9 |
| Actuated g/C Ratio | 0.10 | 0.28 | | 0.13 | 0.30 | | 0.08 | 0.25 | | 0.14 | 0.32 | 0.32 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 175 | 942 | | 222 | 1035 | | 135 | 471 | | 253 | 598 | 508 |
| v/s Ratio Prot | c0.06 | 0.13 | | 0.02 | c0.29 | | 0.03 | 0.13 | | c0.10 | c0.16 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.05 |
| v/c Ratio | 0.57 | 0.46 | | 0.14 | 0.97 | | 0.39 | 0.53 | | 0.68 | 0.49 | 0.15 |
| Uniform Delay, d1 | 38.7 | 27.0 | | 35.0 | 30.9 | | 39.5 | 28.9 | | 36.6 | 24.6 | 21.8 |
| Progression Factor | 1.00 | 1.00 | | 0.71 | 0.52 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 4.1 | 1.6 | | 0.2 | 19.5 | | 1.8 | 4.2 | | 7.4 | 2.8 | 0.6 |
| Delay (s) | 42.9 | 28.6 | | 25.2 | 35.5 | | 41.4 | 33.1 | | 44.0 | 27.4 | 22.4 |
| Level of Service | D | C | | C | D | | D | C | | D | C | C |
| Approach Delay (s) | | 31.1 | | | 35.2 | | | 34.5 | | | 29.8 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 32.8 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.72 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 68.4% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 72 | 394 | 11 | 159 | 726 | 65 | 17 | 69 | 123 | 90 | 109 | 217 |
| Future Volume (vph) | 72 | 394 | 11 | 159 | 726 | 65 | 17 | 69 | 123 | 90 | 109 | 217 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | | 1.00 | 0.85 | 1.00 | 0.90 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3525 | | 1770 | 3495 | | | 1845 | 1583 | 1770 | 1676 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.63 | 1.00 | 0.70 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3525 | | 1770 | 3495 | | | 1179 | 1583 | 1298 | 1676 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 78 | 428 | 12 | 173 | 789 | 71 | 18 | 75 | 134 | 98 | 118 | 236 |
| RTOR Reduction (vph) | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 106 | 0 | 91 | 0 |
| Lane Group Flow (vph) | 78 | 438 | 0 | 173 | 854 | 0 | 0 | 93 | 28 | 98 | 263 | 0 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | 14.7 | 44.8 | | 12.6 | 42.7 | | | 19.1 | 19.1 | 19.1 | 19.1 | |
| Effective Green, g (s) | 14.7 | 44.8 | | 12.6 | 42.7 | | | 19.1 | 19.1 | 19.1 | 19.1 | |
| Actuated g/C Ratio | 0.16 | 0.50 | | 0.14 | 0.47 | | | 0.21 | 0.21 | 0.21 | 0.21 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 289 | 1754 | | 247 | 1658 | | | 250 | 335 | 275 | 355 | |
| v/s Ratio Prot | 0.04 | 0.12 | | c0.10 | c0.24 | | | | | | c0.16 | |
| v/s Ratio Perm | | | | | | | | 0.08 | 0.02 | 0.08 | | |
| v/c Ratio | 0.27 | 0.25 | | 0.70 | 0.52 | | | 0.37 | 0.08 | 0.36 | 0.74 | |
| Uniform Delay, d1 | 33.0 | 13.0 | | 36.9 | 16.5 | | | 30.3 | 28.4 | 30.2 | 33.1 | |
| Progression Factor | 1.07 | 0.20 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 0.4 | 0.3 | | 8.6 | 1.1 | | | 0.9 | 0.1 | 0.8 | 8.1 | |
| Delay (s) | 35.6 | 2.8 | | 45.5 | 17.6 | | | 31.3 | 28.5 | 31.0 | 41.3 | |
| Level of Service | D | A | | D | B | | | C | C | C | D | |
| Approach Delay (s) | | 7.8 | | | 22.3 | | | 29.7 | | | 39.0 | |
| Approach LOS | | A | | | C | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 23.1 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.59 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 56.6% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 2 | 334 | 406 | 237 | 576 | 0 | 0 | 0 | 0 | 229 | 2 | 382 |
| Future Volume (vph) | 2 | 334 | 406 | 237 | 576 | 0 | 0 | 0 | 0 | 229 | 2 | 382 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | | 0.95 | | 0.91 | 0.91 | | | | | 0.95 | 0.95 | 1.00 |
| Frt | | 0.92 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 0.85 |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (prot) | | 3248 | | 1610 | 3383 | | | | | 1681 | 1687 | 1583 |
| Flt Permitted | | 0.95 | | 0.95 | 0.94 | | | | | 0.95 | 0.95 | 1.00 |
| Satd. Flow (perm) | | 3098 | | 1610 | 3178 | | | | | 1681 | 1687 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 2 | 363 | 441 | 258 | 626 | 0 | 0 | 0 | 0 | 249 | 2 | 415 |
| RTOR Reduction (vph) | 0 | 287 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 206 |
| Lane Group Flow (vph) | 0 | 519 | 0 | 232 | 652 | 0 | 0 | 0 | 0 | 124 | 127 | 209 |
| Turn Type | Perm | NA | | Prot | NA | | | | | Prot | NA | Perm |
| Protected Phases | | 4 | | 3 | 8 | | | | | 1 | 6 | |
| Permitted Phases | 4 | | | | | | | | | | | 6 |
| Actuated Green, G (s) | | 17.8 | | 14.7 | 37.0 | | | | | 24.0 | 24.0 | 24.0 |
| Effective Green, g (s) | | 17.8 | | 14.7 | 37.0 | | | | | 24.0 | 24.0 | 24.0 |
| Actuated g/C Ratio | | 0.25 | | 0.21 | 0.53 | | | | | 0.34 | 0.34 | 0.34 |
| Clearance Time (s) | | 4.5 | | 4.5 | 4.5 | | | | | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | | 787 | | 338 | 1722 | | | | | 576 | 578 | 542 |
| v/s Ratio Prot | | | | c0.14 | 0.08 | | | | | 0.07 | 0.08 | |
| v/s Ratio Perm | | c0.17 | | | 0.12 | | | | | | | c0.13 |
| v/c Ratio | | 0.66 | | 0.69 | 0.38 | | | | | 0.22 | 0.22 | 0.39 |
| Uniform Delay, d1 | | 23.4 | | 25.5 | 9.7 | | | | | 16.3 | 16.3 | 17.4 |
| Progression Factor | | 1.00 | | 1.00 | 1.00 | | | | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | | 2.0 | | 5.7 | 0.1 | | | | | 0.2 | 0.2 | 2.1 |
| Delay (s) | | 25.4 | | 31.2 | 9.9 | | | | | 16.5 | 16.5 | 19.5 |
| Level of Service | | C | | C | A | | | | | B | B | B |
| Approach Delay (s) | | 25.4 | | | 15.5 | | | 0.0 | | | 18.4 | |
| Approach LOS | | C | | | B | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.7 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.55 | | |
| Actuated Cycle Length (s) | 70.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 55.9% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM 2010 Signalized Intersection Summary
## 1: El Camino Real & Sneath Lane

03/05/2019

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 405 | 254 | 176 | 452 | 363 | 167 | 268 | 1532 | 351 | 141 | 1131 | 363 |
| Future Volume (veh/h) | 405 | 254 | 176 | 452 | 363 | 167 | 268 | 1532 | 351 | 141 | 1131 | 363 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 440 | 276 | 191 | 491 | 395 | 182 | 291 | 1665 | 382 | 153 | 1229 | 395 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 551 | 567 | 254 | 621 | 639 | 286 | 352 | 2358 | 734 | 206 | 2143 | 667 |
| Arrive On Green | 0.16 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.10 | 0.46 | 0.46 | 0.06 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 440 | 276 | 191 | 491 | 395 | 182 | 291 | 1665 | 382 | 153 | 1229 | 395 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 16.3 | 9.4 | 15.3 | 18.1 | 13.7 | 14.1 | 11.0 | 34.6 | 22.6 | 5.8 | 24.5 | 25.5 |
| Cycle Q Clear(g_c), s | 16.3 | 9.4 | 15.3 | 18.1 | 13.7 | 14.1 | 11.0 | 34.6 | 22.6 | 5.8 | 24.5 | 25.5 |
| 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 | 551 | 567 | 254 | 621 | 639 | 286 | 352 | 2358 | 734 | 206 | 2143 | 667 |
| V/C Ratio(X) | 0.80 | 0.49 | 0.75 | 0.79 | 0.62 | 0.64 | 0.83 | 0.71 | 0.52 | 0.74 | 0.57 | 0.59 |
| Avail Cap(c_a), veh/h | 714 | 734 | 328 | 791 | 814 | 364 | 506 | 2358 | 734 | 324 | 2143 | 667 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.6 | 50.7 | 53.2 | 52.0 | 50.1 | 50.3 | 58.4 | 28.4 | 25.1 | 61.3 | 29.3 | 29.6 |
| Incr Delay (d2), s/veh | 4.9 | 0.6 | 7.0 | 4.2 | 1.0 | 2.4 | 7.5 | 1.8 | 2.6 | 5.2 | 1.1 | 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 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.1 | 4.7 | 7.2 | 9.0 | 6.8 | 6.3 | 5.6 | 16.6 | 10.4 | 2.9 | 11.6 | 11.8 |
| LnGrp Delay(d),s/veh | 58.5 | 51.4 | 60.2 | 56.2 | 51.1 | 52.7 | 65.9 | 30.2 | 27.8 | 66.5 | 30.4 | 33.4 |
| LnGrp LOS | E | D | E | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 907 | | | 1068 | | | 2338 | | | 1777 | |
| Approach Delay, s/veh | | 56.7 | | | 53.7 | | | 34.2 | | | 34.2 | |
| Approach LOS | | E | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 12.5 | 66.0 | | 25.8 | 18.0 | 60.4 | | 28.4 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 12.5 | 61.5 | | 27.5 | 19.5 | 54.5 | | 30.5 |
| Max Q Clear Time (g_c+I1), s | 7.8 | 36.6 | | 18.3 | 13.0 | 27.5 | | 20.1 |
| Green Ext Time (p_c), s | 0.2 | 16.0 | | 2.9 | 0.6 | 12.4 | | 3.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 41.0 |
| HCM 2010 LOS | D |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 485 | 1136 | 1518 | 377 | 0 | 1748 |
| Future Volume (veh/h) | 485 | 1136 | 1518 | 377 | 0 | 1748 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1900 | 0 | 1863 |
| Adj Flow Rate, veh/h | 527 | 1235 | 1650 | 410 | 0 | 1900 |
| Adj No. of Lanes | 2 | 2 | 3 | 0 | 0 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 0 | 2 |
| Cap, veh/h | 1619 | 1311 | 1908 | 468 | 0 | 2380 |
| Arrive On Green | 0.47 | 0.47 | 0.47 | 0.47 | 0.00 | 0.47 |
| Sat Flow, veh/h | 3442 | 2787 | 4245 | 1000 | 0 | 5421 |
| Grp Volume(v), veh/h | 527 | 1235 | 1368 | 692 | 0 | 1900 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1393 | 1695 | 1686 | 0 | 1695 |
| Q Serve(g_s), s | 14.0 | 61.7 | 52.7 | 54.2 | 0.0 | 46.4 |
| Cycle Q Clear(g_c), s | 14.0 | 61.7 | 52.7 | 54.2 | 0.0 | 46.4 |
| Prop In Lane | 1.00 | 1.00 | | 0.59 | 0.00 | |
| Lane Grp Cap(c), veh/h | 1619 | 1311 | 1587 | 789 | 0 | 2380 |
| V/C Ratio(X) | 0.33 | 0.94 | 0.86 | 0.88 | 0.00 | 0.80 |
| Avail Cap(c_a), veh/h | 1705 | 1380 | 1587 | 789 | 0 | 2380 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 24.2 | 36.8 | 34.7 | 35.1 | 0.0 | 33.1 |
| Incr Delay (d2), s/veh | 0.1 | 12.6 | 6.4 | 13.1 | 0.0 | 2.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.7 | 26.0 | 25.9 | 28.0 | 0.0 | 22.3 |
| LnGrp Delay(d),s/veh | 24.3 | 49.4 | 41.2 | 48.2 | 0.0 | 36.0 |
| LnGrp LOS | C | D | D | D | | D |
| Approach Vol, veh/h | 1762 | | 2060 | | | 1900 |
| Approach Delay, s/veh | 41.9 | | 43.5 | | | 36.0 |
| Approach LOS | D | | D | | | D |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 73.0 | | | | 73.0 | | 73.4 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 68.5 | | | | 68.5 | | 72.5 |
| Max Q Clear Time (g_c+I1), s | | 56.2 | | | | 48.4 | | 63.7 |
| Green Ext Time (p_c), s | | 10.0 | | | | 14.2 | | 5.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 40.5 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 211 | 561 | 105 | 34 | 976 | 133 | 92 | 71 | 21 | 135 | 115 | 382 |
| Future Volume (veh/h) | 211 | 561 | 105 | 34 | 976 | 133 | 92 | 71 | 21 | 135 | 115 | 382 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 229 | 610 | 114 | 37 | 1061 | 145 | 100 | 77 | 23 | 147 | 125 | 415 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 266 | 1495 | 279 | 59 | 1205 | 164 | 195 | 440 | 131 | 286 | 212 | 505 |
| Arrive On Green | 0.15 | 0.50 | 0.50 | 0.03 | 0.38 | 0.38 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1774 | 2979 | 556 | 1774 | 3130 | 427 | 862 | 1378 | 412 | 709 | 666 | 1583 |
| Grp Volume(v), veh/h | 229 | 362 | 362 | 37 | 599 | 607 | 100 | 0 | 100 | 272 | 0 | 415 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1765 | 1774 | 1770 | 1787 | 862 | 0 | 1790 | 1375 | 0 | 1583 |
| Q Serve(g_s), s | 11.7 | 11.8 | 11.9 | 1.9 | 29.1 | 29.2 | 10.5 | 0.0 | 3.7 | 13.2 | 0.0 | 22.4 |
| Cycle Q Clear(g_c), s | 11.7 | 11.8 | 11.9 | 1.9 | 29.1 | 29.2 | 27.5 | 0.0 | 3.7 | 17.0 | 0.0 | 22.4 |
| Prop In Lane | 1.00 | | 0.31 | 1.00 | | 0.24 | 1.00 | | 0.23 | 0.54 | | 1.00 |
| Lane Grp Cap(c), veh/h | 266 | 888 | 886 | 59 | 681 | 688 | 195 | 0 | 571 | 498 | 0 | 505 |
| V/C Ratio(X) | 0.86 | 0.41 | 0.41 | 0.63 | 0.88 | 0.88 | 0.51 | 0.00 | 0.18 | 0.55 | 0.00 | 0.82 |
| Avail Cap(c_a), veh/h | 355 | 970 | 967 | 121 | 737 | 744 | 195 | 0 | 571 | 498 | 0 | 505 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 38.4 | 14.4 | 14.4 | 44.2 | 26.5 | 26.5 | 39.1 | 0.0 | 22.7 | 28.1 | 0.0 | 29.1 |
| Incr Delay (d2), s/veh | 14.9 | 0.3 | 0.3 | 10.5 | 11.3 | 11.4 | 9.4 | 0.0 | 0.7 | 4.2 | 0.0 | 14.0 |
| 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 | 6.8 | 5.8 | 5.8 | 1.1 | 16.3 | 16.5 | 3.0 | 0.0 | 1.9 | 6.6 | 0.0 | 11.8 |
| LnGrp Delay(d),s/veh | 53.2 | 14.7 | 14.7 | 54.7 | 37.8 | 37.9 | 48.5 | 0.0 | 23.4 | 32.4 | 0.0 | 43.1 |
| LnGrp LOS | D | B | B | D | D | D | D | | C | C | | D |
| Approach Vol, veh/h | | 953 | | | 1243 | | | 200 | | | 687 | |
| Approach Delay, s/veh | | 24.0 | | | 38.3 | | | 35.9 | | | 38.8 | |
| Approach LOS | | C | | | D | | | D | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 34.0 | 7.6 | 50.9 | | 34.0 | 18.4 | 40.1 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 29.5 | 6.3 | 50.7 | | 29.5 | 18.5 | 38.5 |
| Max Q Clear Time (g_c+I1), s | | 29.5 | 3.9 | 13.9 | | 24.4 | 13.7 | 31.2 |
| Green Ext Time (p_c), s | | 0.0 | 0.0 | 5.2 | | 1.6 | 0.3 | 4.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.9 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 19 | 624 | 41 | 30 | 880 | 27 | 81 | 13 | 59 | 32 | 18 | 91 |
| Future Volume (veh/h) | 19 | 624 | 41 | 30 | 880 | 27 | 81 | 13 | 59 | 32 | 18 | 91 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 21 | 678 | 45 | 33 | 957 | 29 | 88 | 14 | 64 | 35 | 20 | 99 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 40 | 1083 | 72 | 55 | 1157 | 35 | 216 | 34 | 157 | 366 | 385 | 327 |
| Arrive On Green | 0.02 | 0.32 | 0.32 | 0.03 | 0.33 | 0.33 | 0.24 | 0.24 | 0.24 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 1774 | 3369 | 223 | 1774 | 3507 | 106 | 902 | 144 | 656 | 1774 | 1863 | 1583 |
| Grp Volume(v), veh/h | 21 | 356 | 367 | 33 | 483 | 503 | 166 | 0 | 0 | 35 | 20 | 99 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1823 | 1774 | 1770 | 1844 | 1702 | 0 | 0 | 1774 | 1863 | 1583 |
| Q Serve(g_s), s | 1.0 | 15.3 | 15.3 | 1.6 | 22.5 | 22.5 | 7.4 | 0.0 | 0.0 | 1.4 | 0.8 | 4.7 |
| Cycle Q Clear(g_c), s | 1.0 | 15.3 | 15.3 | 1.6 | 22.5 | 22.5 | 7.4 | 0.0 | 0.0 | 1.4 | 0.8 | 4.7 |
| Prop In Lane | 1.00 | | 0.12 | 1.00 | | 0.06 | 0.53 | | 0.39 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 40 | 569 | 586 | 55 | 584 | 608 | 408 | 0 | 0 | 366 | 385 | 327 |
| V/C Ratio(X) | 0.52 | 0.63 | 0.63 | 0.60 | 0.83 | 0.83 | 0.41 | 0.00 | 0.00 | 0.10 | 0.05 | 0.30 |
| Avail Cap(c_a), veh/h | 109 | 701 | 722 | 129 | 721 | 751 | 408 | 0 | 0 | 366 | 385 | 327 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 43.3 | 25.8 | 25.8 | 42.8 | 27.7 | 27.7 | 28.7 | 0.0 | 0.0 | 28.8 | 28.5 | 30.1 |
| Incr Delay (d2), s/veh | 10.0 | 1.2 | 1.2 | 9.8 | 6.6 | 6.3 | 3.0 | 0.0 | 0.0 | 0.5 | 0.3 | 2.4 |
| 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 | 0.6 | 7.6 | 7.9 | 1.0 | 12.1 | 12.5 | 3.8 | 0.0 | 0.0 | 0.8 | 0.4 | 2.3 |
| LnGrp Delay(d),s/veh | 53.3 | 27.0 | 27.0 | 52.6 | 34.2 | 34.0 | 31.7 | 0.0 | 0.0 | 29.3 | 28.8 | 32.5 |
| LnGrp LOS | D | C | C | D | C | C | C | | | C | C | C |
| Approach Vol, veh/h | | 744 | | | 1019 | | | 166 | | | 154 | |
| Approach Delay, s/veh | | 27.8 | | | 34.7 | | | 31.7 | | | 31.3 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 26.0 | 7.3 | 33.3 | | 23.0 | 6.5 | 34.1 |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | | 21.5 | 6.5 | 35.5 | | 18.5 | 5.5 | 36.5 |
| Max Q Clear Time (g_c+I1), s | | 9.4 | 3.6 | 17.3 | | 6.7 | 3.0 | 24.5 |
| Green Ext Time (p_c), s | | 0.7 | 0.0 | 4.3 | | 0.3 | 0.0 | 5.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 31.7 |
| HCM 2010 LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 194 | 280 | 252 | 307 | 447 | 202 | 338 | 1456 | 138 | 326 | 1296 | 187 |
| Future Volume (veh/h) | 194 | 280 | 252 | 307 | 447 | 202 | 338 | 1456 | 138 | 326 | 1296 | 187 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 211 | 304 | 274 | 334 | 486 | 220 | 367 | 1583 | 150 | 354 | 1409 | 203 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 0 | 2 | 3 | 1 | 2 | 3 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 235 | 559 | 250 | 725 | 561 | 253 | 422 | 1952 | 608 | 410 | 1934 | 602 |
| Arrive On Green | 0.13 | 0.16 | 0.16 | 0.21 | 0.24 | 0.24 | 0.12 | 0.38 | 0.38 | 0.12 | 0.38 | 0.38 |
| Sat Flow, veh/h | 1774 | 3539 | 1583 | 3442 | 2375 | 1069 | 3442 | 5085 | 1583 | 3442 | 5085 | 1583 |
| Grp Volume(v), veh/h | 211 | 304 | 274 | 334 | 361 | 345 | 367 | 1583 | 150 | 354 | 1409 | 203 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1583 | 1721 | 1770 | 1674 | 1721 | 1695 | 1583 | 1721 | 1695 | 1583 |
| Q Serve(g_s), s | 16.4 | 11.1 | 17.2 | 11.9 | 27.4 | 27.7 | 14.7 | 39.0 | 5.0 | 14.1 | 33.3 | 8.7 |
| Cycle Q Clear(g_c), s | 16.4 | 11.1 | 17.2 | 11.9 | 27.4 | 27.7 | 14.7 | 39.0 | 5.0 | 14.1 | 33.3 | 8.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.64 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 235 | 559 | 250 | 725 | 418 | 396 | 422 | 1952 | 608 | 410 | 1934 | 602 |
| V/C Ratio(X) | 0.90 | 0.54 | 1.10 | 0.46 | 0.86 | 0.87 | 0.87 | 0.81 | 0.25 | 0.86 | 0.73 | 0.34 |
| Avail Cap(c_a), veh/h | 260 | 1024 | 458 | 725 | 512 | 484 | 504 | 1952 | 608 | 504 | 1934 | 602 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.76 | 0.76 | 0.76 | 0.58 | 0.58 | 0.58 | 1.00 | 1.00 | 1.00 | 0.68 | 0.68 | 0.68 |
| Uniform Delay (d), s/veh | 59.8 | 54.3 | 35.7 | 48.3 | 51.3 | 51.4 | 60.3 | 38.6 | 9.0 | 60.5 | 37.2 | 14.4 |
| Incr Delay (d2), s/veh | 24.0 | 0.6 | 60.0 | 0.3 | 7.7 | 8.6 | 13.3 | 3.8 | 1.0 | 8.9 | 1.7 | 1.0 |
| 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 | 9.6 | 5.5 | 12.2 | 5.7 | 14.3 | 13.8 | 7.8 | 18.9 | 3.7 | 7.2 | 15.8 | 5.0 |
| LnGrp Delay(d),s/veh | 83.8 | 54.9 | 95.7 | 48.6 | 59.0 | 60.0 | 73.6 | 42.4 | 10.0 | 69.4 | 38.9 | 15.4 |
| LnGrp LOS | F | D | F | D | E | E | E | D | A | E | D | B |
| Approach Vol, veh/h | | 789 | | | 1040 | | | 2100 | | | 1966 | |
| Approach Delay, s/veh | | 76.8 | | | 56.0 | | | 45.5 | | | 42.0 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 23.0 | 37.6 | 21.2 | 58.2 | 34.0 | 26.6 | 21.7 | 57.7 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 | 20.5 | 40.5 |
| Max Q Clear Time (g_c+I1), s | 18.4 | 29.7 | 16.1 | 41.0 | 13.9 | 19.2 | 16.7 | 35.3 |
| Green Ext Time (p_c), s | 0.1 | 3.4 | 0.5 | 0.0 | 0.7 | 2.9 | 0.5 | 4.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 50.4 |
| HCM 2010 LOS | D |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 217 | 394 | 0 | 0 | 391 | 206 | 348 | 2 | 0 | 87 | 0 | 82 |
| Future Volume (veh/h) | 217 | 394 | 0 | 0 | 391 | 206 | 348 | 2 | 0 | 87 | 0 | 82 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 0 | 0 | 1863 | 1900 | 1900 | 1863 | 0 | 1863 | 0 | 1863 |
| Adj Flow Rate, veh/h | 236 | 428 | 0 | 0 | 425 | 224 | 378 | 2 | 0 | 95 | 0 | 89 |
| Adj No. of Lanes | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 2 |
| Cap, veh/h | 344 | 717 | 0 | 0 | 710 | 331 | 0 | 595 | 0 | 122 | 0 | 0 |
| Arrive On Green | 0.10 | 0.38 | 0.00 | 0.00 | 0.21 | 0.21 | 0.00 | 0.32 | 0.00 | 0.07 | 0.00 | 0.00 |
| Sat Flow, veh/h | 3442 | 1863 | 0 | 0 | 3558 | 1583 | 0 | 1863 | 0 | 1774 | 95 | |
| Grp Volume(v), veh/h | 236 | 428 | 0 | 0 | 425 | 224 | 0 | 2 | 0 | 95 | 37.3 | |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1863 | 0 | 0 | 1695 | 1583 | 0 | 1863 | 0 | 1774 | D | |
| Q Serve(g_s), s | 3.9 | 10.9 | 0.0 | 0.0 | 6.7 | 7.8 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Cycle Q Clear(g_c), s | 3.9 | 10.9 | 0.0 | 0.0 | 6.7 | 7.8 | 0.0 | 0.0 | 0.0 | 3.1 | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 0.00 | | 0.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 344 | 717 | 0 | 0 | 710 | 331 | 0 | 595 | 0 | 122 | | |
| V/C Ratio(X) | 0.69 | 0.60 | 0.00 | 0.00 | 0.60 | 0.68 | 0.00 | 0.00 | 0.00 | 0.78 | | |
| Avail Cap(c_a), veh/h | 434 | 939 | 0 | 0 | 1026 | 479 | 0 | 595 | 0 | 224 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 25.9 | 14.6 | 0.0 | 0.0 | 21.3 | 21.7 | 0.0 | 13.8 | 0.0 | 27.3 | | |
| Incr Delay (d2), s/veh | 3.2 | 0.8 | 0.0 | 0.0 | 0.8 | 2.4 | 0.0 | 0.0 | 0.0 | 10.1 | | |
| 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 | | |
| %ile BackOfQ(50%),veh/ln | 2.0 | 5.7 | 0.0 | 0.0 | 3.2 | 3.6 | 0.0 | 0.0 | 0.0 | 1.9 | | |
| LnGrp Delay(d),s/veh | 29.1 | 15.4 | 0.0 | 0.0 | 22.1 | 24.1 | 0.0 | 13.8 | 0.0 | 37.3 | | |
| LnGrp LOS | C | B | | | C | C | | B | | D | | |
| Approach Vol, veh/h | | 664 | | | 649 | | | 2 | | | | |
| Approach Delay, s/veh | | 20.3 | | | 22.8 | | | 13.8 | | | | |
| Approach LOS | | C | | | C | | | B | | | | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 23.5 | | 27.4 | 0.0 | | 10.4 | 17.0 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 7.5 | 19.0 | | 30.0 | 5.0 | | 7.5 | 18.0 |
| Max Q Clear Time (g_c+I1), s | 5.9 | 2.0 | | 12.9 | 0.0 | | 5.9 | 9.8 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | | 2.5 | 0.0 | | 0.1 | 2.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.6 |
| HCM 2010 LOS | C |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 17 | 30 | 7 | 12 | 81 | 62 | 2 | 73 | 1 | 12 | 59 | 12 |
| Future Vol, veh/h | 17 | 30 | 7 | 12 | 81 | 62 | 2 | 73 | 1 | 12 | 59 | 12 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 33 | 8 | 13 | 88 | 67 | 2 | 79 | 1 | 13 | 64 | 13 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.9 | 8.2 | 8.1 | 8.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 3% | 31% | 8% | 14% |
| Vol Thru, % | 96% | 56% | 52% | 71% |
| Vol Right, % | 1% | 13% | 40% | 14% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 76 | 54 | 155 | 83 |
| LT Vol | 2 | 17 | 12 | 12 |
| Through Vol | 73 | 30 | 81 | 59 |
| RT Vol | 1 | 7 | 62 | 12 |
| Lane Flow Rate | 83 | 59 | 168 | 90 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.104 | 0.073 | 0.196 | 0.112 |
| Departure Headway (Hd) | 4.538 | 4.501 | 4.179 | 4.475 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 791 | 798 | 861 | 802 |
| Service Time | 2.557 | 2.518 | 2.192 | 2.494 |
| HCM Lane V/C Ratio | 0.105 | 0.074 | 0.195 | 0.112 |
| HCM Control Delay | 8.1 | 7.9 | 8.2 | 8.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.2 | 0.7 | 0.4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 1 | 58 | 12 | 39 | 136 | 14 | 12 | 3 | 27 | 5 | 3 | 3 |
| Future Vol, veh/h | 1 | 58 | 12 | 39 | 136 | 14 | 12 | 3 | 27 | 5 | 3 | 3 |
| 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 | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 63 | 13 | 42 | 148 | 15 | 13 | 3 | 29 | 5 | 3 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 163 | 0 | 0 | 76 | 0 | 0 | 315 | 319 | 70 | 328 | 318 | 156 |
| Stage 1 | - | - | - | - | - | - | 72 | 72 | - | 240 | 240 | - |
| Stage 2 | - | - | - | - | - | - | 243 | 247 | - | 88 | 78 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1416 | - | - | 1523 | - | - | 638 | 598 | 993 | 625 | 598 | 890 |
| Stage 1 | - | - | - | - | - | - | 938 | 835 | - | 763 | 707 | - |
| Stage 2 | - | - | - | - | - | - | 761 | 702 | - | 920 | 830 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1416 | - | - | 1523 | - | - | 618 | 579 | 993 | 589 | 579 | 890 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 618 | 579 | - | 589 | 579 | - |
| Stage 1 | - | - | - | - | - | - | 937 | 834 | - | 762 | 686 | - |
| Stage 2 | - | - | - | - | - | - | 732 | 681 | - | 888 | 829 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 1.5 | 9.7 | 10.7 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 811 | 1416 | - | - | 1523 | - | - | 645 |
| HCM Lane V/C Ratio | 0.056 | 0.001 | - | - | 0.028 | - | - | 0.019 |
| HCM Control Delay (s) | 9.7 | 7.5 | 0 | - | 7.4 | 0 | - | 10.7 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0.1 | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 99 | 3 | 16 | 171 | 12 | 3 | 0 | 13 | 0 | 0 | 0 |
| Future Vol, veh/h | 4 | 99 | 3 | 16 | 171 | 12 | 3 | 0 | 13 | 0 | 0 | 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 | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 108 | 3 | 17 | 186 | 13 | 3 | 0 | 14 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 199 | 0 | 0 | 111 | 0 | 0 | 345 | 351 | 110 |
| Stage 1 | - | - | - | - | - | - | 118 | 118 | - |
| Stage 2 | - | - | - | - | - | - | 227 | 233 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 6.42 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 5.42 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1373 | - | - | 1479 | - | - | 652 | 573 | 943 |
| Stage 1 | - | - | - | - | - | - | 907 | 798 | - |
| Stage 2 | - | - | - | - | - | - | 811 | 712 | - |
| Platoon blocked, % | | - | - | | - | - | | | |
| Mov Cap-1 Maneuver | 1373 | - | - | 1479 | - | - | 642 | 0 | 943 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 642 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 904 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 800 | 0 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.6 | 9.2 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 867 | 1373 | - | - | 1479 | - | - |
| HCM Lane V/C Ratio | 0.02 | 0.003 | - | - | 0.012 | - | - |
| HCM Control Delay (s) | 9.2 | 7.6 | 0 | - | 7.5 | 0 | - |
| HCM Lane LOS | A | A | A | - | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 57 | 72 | 98 | 1770 | 1748 | 114 |
| Future Volume (veh/h) | 57 | 72 | 98 | 1770 | 1748 | 114 |
| Number | 7 | 14 | 5 | 2 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 62 | 78 | 107 | 1924 | 1900 | 124 |
| Adj No. of Lanes | 1 | 1 | 1 | 3 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 150 | 133 | 137 | 3763 | 2806 | 183 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.74 | 0.58 | 0.58 |
| Sat Flow, veh/h | 1774 | 1583 | 1774 | 5253 | 5047 | 317 |
| Grp Volume(v), veh/h | 62 | 78 | 107 | 1924 | 1318 | 706 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1583 | 1774 | 1695 | 1695 | 1807 |
| Q Serve(g_s), s | 1.7 | 2.4 | 3.0 | 8.1 | 13.8 | 13.9 |
| Cycle Q Clear(g_c), s | 1.7 | 2.4 | 3.0 | 8.1 | 13.8 | 13.9 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.18 |
| Lane Grp Cap(c), veh/h | 150 | 133 | 137 | 3763 | 1950 | 1039 |
| V/C Ratio(X) | 0.41 | 0.58 | 0.78 | 0.51 | 0.68 | 0.68 |
| Avail Cap(c_a), veh/h | 627 | 560 | 191 | 3763 | 1950 | 1039 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 22.3 | 22.6 | 23.2 | 2.8 | 7.6 | 7.6 |
| Incr Delay (d2), s/veh | 1.8 | 4.0 | 13.1 | 0.5 | 1.9 | 3.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 2.3 | 2.0 | 3.7 | 6.9 | 7.9 |
| LnGrp Delay(d),s/veh | 24.1 | 26.6 | 36.3 | 3.3 | 9.5 | 11.2 |
| LnGrp LOS | C | C | D | A | A | B |
| Approach Vol, veh/h | 140 | | | 2031 | 2024 | |
| Approach Delay, s/veh | 25.5 | | | 5.0 | 10.1 | |
| Approach LOS | C | | | A | B | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | 5 | 6 | | |
| Phs Duration (G+Y+Rc), s | | 42.4 | | 8.8 | 8.4 | 34.0 | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | 4.5 | 4.5 | | |
| Max Green Setting (Gmax), s | | 37.9 | | 18.1 | 5.5 | 27.9 | | |
| Max Q Clear Time (g_c+I1), s | | 10.1 | | 4.4 | 5.0 | 15.9 | | |
| Green Ext Time (p_c), s | | 18.1 | | 0.3 | 0.0 | 9.6 | | |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 8.1 |
| HCM 2010 LOS | A |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 10 | 18 | 30 | 7 | 5 | 4 | 4 |
| Future Vol, veh/h | 3 | 23 | 4 | 15 | 24 | 10 | 18 | 30 | 7 | 5 | 4 | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 25 | 4 | 16 | 26 | 11 | 20 | 33 | 8 | 5 | 4 | 4 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.2 | 7.3 | 7.4 | 7.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 33% | 10% | 31% | 38% |
| Vol Thru, % | 55% | 77% | 49% | 31% |
| Vol Right, % | 13% | 13% | 20% | 31% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 55 | 30 | 49 | 13 |
| LT Vol | 18 | 3 | 15 | 5 |
| Through Vol | 30 | 23 | 24 | 4 |
| RT Vol | 7 | 4 | 10 | 4 |
| Lane Flow Rate | 60 | 33 | 53 | 14 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.068 | 0.037 | 0.06 | 0.016 |
| Departure Headway (Hd) | 4.082 | 4.043 | 4.027 | 4.02 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 873 | 881 | 886 | 884 |
| Service Time | 2.126 | 2.09 | 2.069 | 2.074 |
| HCM Lane V/C Ratio | 0.069 | 0.037 | 0.06 | 0.016 |
| HCM Control Delay | 7.4 | 7.2 | 7.3 | 7.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.1 | 0.2 | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 102 | 109 | 1679 | 36 | 215 | 1577 |
| Future Volume (veh/h) | 102 | 109 | 1679 | 36 | 215 | 1577 |
| Number | 3 | 18 | 2 | 12 | 1 | 6 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 111 | 118 | 1825 | 39 | 234 | 1714 |
| Adj No. of Lanes | 0 | 0 | 3 | 0 | 1 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 0 | 0 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 126 | 134 | 3846 | 82 | 224 | 3817 |
| Arrive On Green | 0.16 | 0.16 | 0.75 | 0.75 | 0.75 | 0.75 |
| Sat Flow, veh/h | 806 | 857 | 5292 | 109 | 245 | 5253 |
| Grp Volume(v), veh/h | 230 | 0 | 1207 | 657 | 234 | 1714 |
| Grp Sat Flow(s),veh/h/ln | 1671 | 0 | 1695 | 1843 | 245 | 1695 |
| Q Serve(g_s), s | 13.1 | 0.0 | 13.4 | 13.4 | 59.6 | 12.3 |
| Cycle Q Clear(g_c), s | 13.1 | 0.0 | 13.4 | 13.4 | 73.0 | 12.3 |
| Prop In Lane | 0.48 | 0.51 | | 0.06 | 1.00 | |
| Lane Grp Cap(c), veh/h | 262 | 0 | 2545 | 1384 | 224 | 3817 |
| V/C Ratio(X) | 0.88 | 0.00 | 0.47 | 0.47 | 1.04 | 0.45 |
| Avail Cap(c_a), veh/h | 309 | 0 | 2545 | 1384 | 224 | 3817 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 4.7 | 4.7 | 28.7 | 4.6 |
| Incr Delay (d2), s/veh | 21.2 | 0.0 | 0.6 | 1.2 | 72.2 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.6 | 0.0 | 6.4 | 7.2 | 10.5 | 5.8 |
| LnGrp Delay(d),s/veh | 61.3 | 0.0 | 5.3 | 5.9 | 100.9 | 4.9 |
| LnGrp LOS | E | | A | A | F | A |
| Approach Vol, veh/h | 230 | | 1864 | | | 1948 |
| Approach Delay, s/veh | 61.3 | | 5.5 | | | 16.5 |
| Approach LOS | E | | A | | | B |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 77.5 | | | | 77.5 | | 19.8 |
| Change Period (Y+Rc), s | | 4.5 | | | | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | | 73.0 | | | | 73.0 | | 18.0 |
| Max Q Clear Time (g_c+I1), s | | 15.4 | | | | 75.0 | | 15.1 |
| Green Ext Time (p_c), s | | 23.8 | | | | 0.0 | | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 14.0 |
| HCM 2010 LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1459 | 40 | 111 | 1437 | 161 |
| Future Volume (veh/h) | 99 | 49 | 105 | 108 | 50 | 60 | 141 | 1459 | 40 | 111 | 1437 | 161 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| 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 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 108 | 53 | 114 | 117 | 54 | 65 | 153 | 1586 | 43 | 121 | 1562 | 175 |
| Adj No. of Lanes | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 3 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 146 | 72 | 191 | 154 | 71 | 197 | 189 | 2270 | 62 | 153 | 1975 | 221 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 | 0.45 | 0.45 | 0.09 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1209 | 593 | 1583 | 1232 | 569 | 1583 | 1774 | 5091 | 138 | 1774 | 4642 | 519 |
| Grp Volume(v), veh/h | 161 | 0 | 114 | 171 | 0 | 65 | 153 | 1056 | 573 | 121 | 1140 | 597 |
| Grp Sat Flow(s),veh/h/ln | 1802 | 0 | 1583 | 1801 | 0 | 1583 | 1774 | 1695 | 1838 | 1774 | 1695 | 1771 |
| Q Serve(g_s), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 20.3 | 20.3 | 5.4 | 23.6 | 23.6 |
| Cycle Q Clear(g_c), s | 7.0 | 0.0 | 5.5 | 7.4 | 0.0 | 3.0 | 6.8 | 20.3 | 20.3 | 5.4 | 23.6 | 23.6 |
| Prop In Lane | 0.67 | | 1.00 | 0.68 | | 1.00 | 1.00 | | 0.08 | 1.00 | | 0.29 |
| Lane Grp Cap(c), veh/h | 218 | 0 | 191 | 225 | 0 | 197 | 189 | 1512 | 820 | 153 | 1442 | 753 |
| V/C Ratio(X) | 0.74 | 0.00 | 0.60 | 0.76 | 0.00 | 0.33 | 0.81 | 0.70 | 0.70 | 0.79 | 0.79 | 0.79 |
| Avail Cap(c_a), veh/h | 403 | 0 | 354 | 403 | 0 | 354 | 256 | 1512 | 820 | 213 | 1442 | 753 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 0.0 | 33.7 | 34.3 | 0.0 | 32.3 | 35.4 | 18.1 | 18.1 | 36.3 | 20.1 | 20.2 |
| Incr Delay (d2), s/veh | 4.8 | 0.0 | 2.9 | 5.3 | 0.0 | 1.0 | 12.8 | 2.7 | 4.9 | 12.7 | 4.5 | 8.4 |
| 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 | 3.8 | 0.0 | 2.6 | 4.0 | 0.0 | 1.4 | 4.0 | 10.0 | 11.3 | 3.2 | 11.8 | 13.2 |
| LnGrp Delay(d),s/veh | 39.2 | 0.0 | 36.7 | 39.5 | 0.0 | 33.3 | 48.2 | 20.8 | 23.0 | 49.0 | 24.6 | 28.5 |
| LnGrp LOS | D | | D | D | | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 275 | | | 236 | | | 1782 | | | 1858 | |
| Approach Delay, s/veh | | 38.1 | | | 37.8 | | | 23.8 | | | 27.5 | |
| Approach LOS | | D | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | 11.5 | 40.6 | | 14.3 | 13.1 | 38.9 | | 14.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Max Green Setting (Gmax), s | 9.7 | 36.1 | | 18.1 | 11.7 | 34.1 | | 18.1 |
| Max Q Clear Time (g_c+I1), s | 7.4 | 22.3 | | 9.0 | 8.8 | 25.6 | | 9.4 |
| Green Ext Time (p_c), s | 0.1 | 9.1 | | 0.8 | 0.1 | 6.5 | | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 27.2 |
| HCM 2010 LOS | C |