























Intersection LOS

HCM Unsignalized Intersection Capacity Analysis

1: US 50 #1 & Grand Mesa Ave

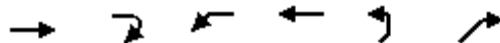
10/28/2008

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|---|--|---|---|--|---|--|--|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | | |   | | |  |  |
| Volume (veh/h) | 2 | 746 | 0 | 44 | 1492 | 10 | 2 | 0 | 3 | 2 | 0 | 34 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 2 | 811 | 0 | 48 | 1622 | 11 | 2 | 0 | 3 | 2 | 0 | 37 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | 2 |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1633 | | | 811 | | | 1740 | 2543 | 405 | 2136 | 2538 | 816 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1633 | | | 811 | | | 1740 | 2543 | 405 | 2136 | 2538 | 816 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 94 | | | 95 | 100 | 99 | 91 | 100 | 88 |
| cM capacity (veh/h) | 367 | | | 773 | | | 44 | 23 | 578 | 24 | 23 | 308 |
| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 | | | | |
| Volume Total | 2 | 541 | 270 | 48 | 1081 | 551 | 5 | 39 | | | | |
| Volume Left | 2 | 0 | 0 | 48 | 0 | 0 | 2 | 2 | | | | |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 11 | 3 | 37 | | | | |
| cSH | 367 | 1700 | 1700 | 773 | 1700 | 1700 | 98 | 326 | | | | |
| Volume to Capacity | 0.01 | 0.32 | 0.16 | 0.06 | 0.64 | 0.32 | 0.06 | 0.12 | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 5 | 0 | 0 | 4 | 10 | | | | |
| Control Delay (s) | 14.9 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 44.0 | 26.6 | | | | |
| Lane LOS | B | | | A | | | E | D | | | | |
| Approach Delay (s) | 0.0 | | | 0.3 | | | 44.0 | 26.6 | | | | |
| Approach LOS | | | | | | | E | D | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 0.7 | | | | | | | | | |
| Intersection Capacity Utilization | | | 58.2% | | ICU Level of Service | | | B | | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

2: US 50 #1 & Gunnison Blvd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NEL | NER |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | ↘ | |
| Volume (veh/h) | 747 | 11 | 0 | 1543 | 0 | 5 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 795 | 12 | 0 | 1641 | 0 | 5 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | 1069 | | |
| pX, platoon unblocked | | | | | 0.67 | |
| vC, conflicting volume | | | 806 | | 1621 | 403 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 806 | | 929 | 403 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 99 |
| cM capacity (veh/h) | | | 777 | | 170 | 580 |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NE 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 530 | 277 | 821 | 821 | 5 |
| Volume Left | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 12 | 0 | 0 | 5 |
| cSH | 1700 | 1700 | 1700 | 1700 | 580 |
| Volume to Capacity | 0.31 | 0.16 | 0.48 | 0.48 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 11.3 |
| Lane LOS | | | | | B |
| Approach Delay (s) | 0.0 | | 0.0 | | 11.3 |
| Approach LOS | | | | | B |

| Intersection Summary | | | | | |
|-----------------------------------|--|--|-------|----------------------|---|
| Average Delay | | | 0.0 | | |
| Intersection Capacity Utilization | | | 52.7% | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

3: US 50 #1 & Santa Clara Ave

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↗ | ↑↑ | | ↖ | ↑↑ | | | ↕ | | | ↕ | |
| Volume (veh/h) | 30 | 721 | 0 | 1 | 1484 | 2 | 0 | 0 | 1 | 0 | 0 | 41 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 33 | 784 | 0 | 1 | 1613 | 2 | 0 | 0 | 1 | 0 | 0 | 45 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | 634 | | | | | | | |
| pX, platoon unblocked | 0.67 | | | | | | 0.67 | 0.67 | | 0.67 | 0.67 | 0.67 |
| vC, conflicting volume | 1615 | | | 784 | | | 1702 | 2466 | 392 | 2074 | 2465 | 808 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 923 | | | 784 | | | 1053 | 2199 | 392 | 1611 | 2198 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 93 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 94 |
| cM capacity (veh/h) | 466 | | | 792 | | | 102 | 25 | 590 | 41 | 25 | 710 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 33 | 522 | 261 | 1 | 1075 | 540 | 1 | 45 |
| Volume Left | 33 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 45 |
| cSH | 466 | 1700 | 1700 | 792 | 1700 | 1700 | 590 | 710 |
| Volume to Capacity | 0.07 | 0.31 | 0.15 | 0.00 | 0.63 | 0.32 | 0.00 | 0.06 |
| Queue Length 95th (ft) | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Control Delay (s) | 13.3 | 0.0 | 0.0 | 9.5 | 0.0 | 0.0 | 11.1 | 10.4 |
| Lane LOS | B | | | A | | | B | B |
| Approach Delay (s) | 0.5 | | | 0.0 | | | 11.1 | 10.4 |
| Approach LOS | | | | | | | B | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.4 |
| Intersection Capacity Utilization | 51.1% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

5: US 50 #1 & James St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↕ | | ↖ | ↕ | | | ↕ | | | ↕ | |
| Volume (veh/h) | 0 | 532 | 0 | 0 | 1253 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Hourly flow rate (vph) | 0 | 585 | 0 | 0 | 1377 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | 513 | | | | | | | | | | |
| pX, platoon unblocked | | | | 0.98 | | | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | |
| vC, conflicting volume | 1377 | | | 585 | | | 1273 | 1962 | 292 | 1669 | 1962 | 688 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1377 | | | 527 | | | 1232 | 1937 | 228 | 1638 | 1937 | 688 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 464 | | | 972 | | | 124 | 59 | 739 | 61 | 59 | 375 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 0 | 390 | 195 | 0 | 918 | 459 | 0 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.00 | 0.23 | 0.11 | 0.00 | 0.54 | 0.27 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | | | | | A | A |
| Approach Delay (s) | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Approach LOS | | | | | | | A | A |

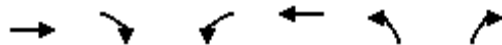
Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.0 |
| Intersection Capacity Utilization | 38.0% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

6: US 50 #1 & Green Acre 1

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↗ |
| Volume (veh/h) | 530 | 0 | 0 | 1252 | 0 | 0 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly flow rate (vph) | 589 | 0 | 0 | 1391 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 1023 | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 589 | 1284 | 294 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 589 | 1284 | 294 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 100 | 100 | 100 | |
| cM capacity (veh/h) | | | 942 | 149 | 684 | |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NB 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 393 | 196 | 696 | 696 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.23 | 0.12 | 0.41 | 0.41 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | | | A |
| Approach Delay (s) | 0.0 | | 0.0 | | 0.0 |
| Approach LOS | | | | | A |

| Intersection Summary | | | | | |
|-----------------------------------|--|--|-------|----------------------|---|
| Average Delay | | | 0.0 | | |
| Intersection Capacity Utilization | | | 37.9% | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

7: US 50 #1 & Elm Park

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | ↙ | ↑↑ | ↘ | |
| Volume (veh/h) | 522 | 4 | 5 | 1263 | 6 | 6 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly flow rate (vph) | 580 | 4 | 6 | 1403 | 7 | 7 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 1190 | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 584 | | | 292 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 584 | | | 292 |
| tC, single (s) | | | 4.3 | | | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | | 3.4 |
| p0 queue free % | | | 99 | | | 99 |
| cM capacity (veh/h) | | | 946 | | | 687 |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 387 | 198 | 6 | 702 | 702 | 13 |
| Volume Left | 0 | 0 | 6 | 0 | 0 | 7 |
| Volume Right | 0 | 4 | 0 | 0 | 0 | 7 |
| cSH | 1700 | 1700 | 946 | 1700 | 1700 | 240 |
| Volume to Capacity | 0.23 | 0.12 | 0.01 | 0.41 | 0.41 | 0.06 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 4 |
| Control Delay (s) | 0.0 | 0.0 | 8.8 | 0.0 | 0.0 | 20.9 |
| Lane LOS | A | | | C | | |
| Approach Delay (s) | 0.0 | | 0.0 | | 20.9 | |
| Approach LOS | | | | C | | |

| Intersection Summary | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|---|
| Average Delay | | | 0.2 | | | |
| Intersection Capacity Utilization | | | 44.9% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

8: US 50 #1 & Green Acre 2

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|-----------------------------------|------|------|-------|----------------------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↗ |
| Volume (veh/h) | 519 | 1 | 0 | 1264 | 0 | 9 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 583 | 1 | 0 | 1420 | 0 | 10 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 584 | 1294 | 292 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 584 | 1294 | 292 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 100 | 100 | 99 | |
| cM capacity (veh/h) | | | 946 | 147 | 687 | |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NB 1 | |
| Volume Total | 389 | 196 | 710 | 710 | 10 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 1 | 0 | 0 | 10 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 687 | |
| Volume to Capacity | 0.23 | 0.12 | 0.42 | 0.42 | 0.01 | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 1 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 10.3 | |
| Lane LOS | | | | | B | |
| Approach Delay (s) | 0.0 | | 0.0 | | 10.3 | |
| Approach LOS | | | | | B | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 38.3% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

9: US 50 #1 & Aspen St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 13 | 512 | 2 | 1 | 1261 | 2 | 1 | 0 | 4 | 2 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 15 | 575 | 2 | 1 | 1417 | 2 | 1 | 0 | 4 | 2 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1419 | | | 578 | | | 1316 | 2027 | 289 | 1742 | 2027 | 710 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1419 | | | 578 | | | 1316 | 2027 | 289 | 1742 | 2027 | 710 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 97 | | | 100 | | | 99 | 100 | 99 | 96 | 100 | 100 |
| cM capacity (veh/h) | 446 | | | 952 | | | 107 | 51 | 690 | 50 | 51 | 363 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 15 | 384 | 194 | 1 | 945 | 475 | 6 | 2 |
| Volume Left | 15 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| Volume Right | 0 | 0 | 2 | 0 | 0 | 2 | 4 | 0 |
| cSH | 446 | 1700 | 1700 | 952 | 1700 | 1700 | 330 | 50 |
| Volume to Capacity | 0.03 | 0.23 | 0.11 | 0.00 | 0.56 | 0.28 | 0.02 | 0.04 |
| Queue Length 95th (ft) | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| Control Delay (s) | 13.3 | 0.0 | 0.0 | 8.8 | 0.0 | 0.0 | 16.1 | 79.8 |
| Lane LOS | B | | | A | | | C | F |
| Approach Delay (s) | 0.3 | | | 0.0 | | | 16.1 | 79.8 |
| Approach LOS | | | | | | | C | F |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.2 |
| Intersection Capacity Utilization | 44.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

10: US 50 #1 & Palmer St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 2 | 512 | 0 | 0 | 1291 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 2 | 575 | 0 | 0 | 1451 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1451 | | | 575 | | | 1305 | 2030 | 288 | 1743 | 2030 | 725 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1451 | | | 575 | | | 1305 | 2030 | 288 | 1743 | 2030 | 725 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 434 | | | 954 | | | 111 | 52 | 691 | 52 | 52 | 354 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 2 | 384 | 192 | 967 | 484 | 0 | 0 |
| Volume Left | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| cSH | 434 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.01 | 0.23 | 0.11 | 0.57 | 0.28 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 13.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | B | | | | | A | A |
| Approach Delay (s) | 0.1 | | | 0.0 | | 0.0 | 0.0 |
| Approach LOS | | | | | | A | A |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.0 |
| Intersection Capacity Utilization | 39.0% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

11: US 50 #1 & Palisade St

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Volume (veh/h) | 12 | 514 | 1302 | 8 | 0 | 5 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 13 | 578 | 1463 | 9 | 0 | 6 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 1472 | | | | 1783 | 736 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1472 | | | | 1783 | 736 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 97 | | | | 100 | 98 |
| cM capacity (veh/h) | 425 | | | | 66 | 348 |





















| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 13 | 289 | 289 | 975 | 497 | 6 |
| Volume Left | 13 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 9 | 6 |
| cSH | 425 | 1700 | 1700 | 1700 | 1700 | 348 |
| Volume to Capacity | 0.03 | 0.17 | 0.17 | 0.57 | 0.29 | 0.02 |
| Queue Length 95th (ft) | 2 | 0 | 0 | 0 | 0 | 1 |
| Control Delay (s) | 13.7 | 0.0 | 0.0 | 0.0 | 0.0 | 15.5 |
| Lane LOS | B | | | | | C |
| Approach Delay (s) | 0.3 | | | 0.0 | | 15.5 |
| Approach LOS | | | | | | C |

| Intersection Summary | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|---|
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 46.2% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Intersection has too many legs for HCM analysis.

HCM Unsignalized Intersection Capacity Analysis
 14: US 50 #1 & Dorothy Ave













10/28/2008

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | | |  | | |  |  |
| Volume (veh/h) | 2 | 417 | 66 | 0 | 1070 | 10 | 33 | 0 | 3 | 13 | 0 | 20 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 2 | 469 | 74 | 0 | 1202 | 11 | 37 | 0 | 3 | 15 | 0 | 22 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | 807 | | | | | | | | | | |
| pX, platoon unblocked | | | | 0.98 | | | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| vC, conflicting volume | 1213 | | | 469 | | | 1097 | 1687 | 234 | 1450 | 1681 | 607 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1213 | | | 425 | | | 1064 | 1664 | 187 | 1423 | 1658 | 607 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 76 | 100 | 100 | 84 | 100 | 95 |
| cM capacity (veh/h) | 538 | | | 1071 | | | 157 | 88 | 791 | 89 | 89 | 425 |
| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 | | | |
| Volume Total | 2 | 234 | 234 | 74 | 0 | 801 | 412 | 40 | 37 | | | |
| Volume Left | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 15 | | | |
| Volume Right | 0 | 0 | 0 | 74 | 0 | 0 | 11 | 3 | 22 | | | |
| cSH | 538 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 168 | 171 | | | |
| Volume to Capacity | 0.00 | 0.14 | 0.14 | 0.04 | 0.00 | 0.47 | 0.24 | 0.24 | 0.22 | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 20 | | | |
| Control Delay (s) | 11.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.0 | 31.9 | | | |
| Lane LOS | B | | | | | | | D | D | | | |
| Approach Delay (s) | 0.0 | | | | 0.0 | | | 33.0 | 31.9 | | | |
| Approach LOS | | | | | | | | D | D | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 1.4 | | | | | | | | | |
| Intersection Capacity Utilization | | | 40.7% | | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

Intersection Sign configuration not allowed in HCM analysis.

HCM Unsignalized Intersection Capacity Analysis
 16: US 50 #1 & WB On-Ramp

10/28/2008

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↑↑ | | | ↑↑ | | | | ↗ | | | ↗ |
| Volume (veh/h) | 0 | 366 | 0 | 0 | 790 | 0 | 0 | 0 | 3 | 0 | 0 | 360 |
| Sign Control | | Free | | | Free | | | Yield | | | Yield | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 0 | 398 | 0 | 0 | 859 | 0 | 0 | 0 | 3 | 0 | 0 | 391 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 859 | | | 398 | | | 1218 | 1257 | 199 | 1061 | 1257 | 429 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 859 | | | 398 | | | 1218 | 1257 | 199 | 1061 | 1257 | 429 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 30 |
| cM capacity (veh/h) | 741 | | | 1116 | | | 39 | 162 | 790 | 170 | 162 | 558 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NB 1 | SB 1 | | | | | | |
| Volume Total | 199 | 199 | 429 | 429 | 3 | 391 | | | | | | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| Volume Right | 0 | 0 | 0 | 0 | 3 | 391 | | | | | | |
| cSH | 1700 | 1700 | 1700 | 1700 | 790 | 558 | | | | | | |
| Volume to Capacity | 0.12 | 0.12 | 0.25 | 0.25 | 0.00 | 0.70 | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 139 | | | | | | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 9.6 | 25.2 | | | | | | |
| Lane LOS | | | | | A | D | | | | | | |
| Approach Delay (s) | 0.0 | | 0.0 | | 9.6 | 25.2 | | | | | | |
| Approach LOS | | | | | A | D | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 6.0 | | | | | | | | | |
| Intersection Capacity Utilization | | | 50.8% | | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis
 17: US 50 #1 & Frontage Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↗ | ↑↑ | ↖ | ↗ | ↑↑ | ↖ | | ↕ | | | ↕ | |
| Volume (veh/h) | 40 | 306 | 15 | 15 | 741 | 9 | 4 | 4 | 3 | 0 | 5 | 45 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Hourly flow rate (vph) | 47 | 356 | 17 | 17 | 862 | 10 | 5 | 5 | 3 | 0 | 6 | 52 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 872 | | | 373 | | | 970 | 1356 | 178 | 1173 | 1363 | 431 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 872 | | | 373 | | | 970 | 1356 | 178 | 1173 | 1363 | 431 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 94 | | | 98 | | | 97 | 96 | 100 | 100 | 95 | 91 |
| cM capacity (veh/h) | 732 | | | 1140 | | | 164 | 130 | 816 | 128 | 128 | 556 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 47 | 178 | 178 | 17 | 17 | 431 | 431 | 10 | 13 | 58 |
| Volume Left | 47 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 5 | 0 |
| Volume Right | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 10 | 3 | 52 |
| cSH | 732 | 1700 | 1700 | 1700 | 1140 | 1700 | 1700 | 1700 | 187 | 417 |
| Volume to Capacity | 0.06 | 0.10 | 0.10 | 0.01 | 0.02 | 0.25 | 0.25 | 0.01 | 0.07 | 0.14 |
| Queue Length 95th (ft) | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 12 |
| Control Delay (s) | 10.3 | 0.0 | 0.0 | 0.0 | 8.2 | 0.0 | 0.0 | 0.0 | 25.7 | 15.0 |
| Lane LOS | B | | | | A | | | | D | C |
| Approach Delay (s) | 1.1 | | | | 0.2 | | | | 25.7 | 15.0 |
| Approach LOS | | | | | | | | | D | C |

Intersection Summary

| | | | | | | | | | | |
|-----------------------------------|--|-------|--|----------------------|--|--|--|--|---|--|
| Average Delay | | 1.3 | | | | | | | | |
| Intersection Capacity Utilization | | 37.9% | | ICU Level of Service | | | | | A | |
| Analysis Period (min) | | 15 | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

18: US 50 WB #3 & 27 3/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | ↙ | ↕ | ↗ | | ↖ | | | ↘ | ↗ |
| Volume (veh/h) | 0 | 0 | 0 | 9 | 727 | 30 | 1 | 27 | 0 | 0 | 28 | 34 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 10 | 790 | 33 | 1 | 29 | 0 | 0 | 30 | 37 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 823 | | | 0 | | | 467 | 842 | 0 | 824 | 810 | 395 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 823 | | | 0 | | | 467 | 842 | 0 | 824 | 810 | 395 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 99 | | | 100 | 90 | 100 | 100 | 90 | 94 |
| cM capacity (veh/h) | 765 | | | 1579 | | | 400 | 286 | 1065 | 234 | 300 | 587 |

| Direction, Lane # | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 10 | 395 | 395 | 33 | 30 | 67 |
| Volume Left | 10 | 0 | 0 | 0 | 1 | 0 |
| Volume Right | 0 | 0 | 0 | 33 | 0 | 37 |
| cSH | 1579 | 1700 | 1700 | 1700 | 289 | 410 |
| Volume to Capacity | 0.01 | 0.23 | 0.23 | 0.02 | 0.11 | 0.16 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 9 | 15 |
| Control Delay (s) | 7.3 | 0.0 | 0.0 | 0.0 | 18.9 | 15.5 |
| Lane LOS | A | | | | C | C |
| Approach Delay (s) | 0.1 | | | | 18.9 | 15.5 |
| Approach LOS | | | | | C | C |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 1.8 |
| Intersection Capacity Utilization | 30.3% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

19: US 50 EB #2 & 27 3/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 21 | 293 | 0 | 0 | 0 | 0 | 0 | 7 | 4 | 24 | 13 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 23 | 318 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 26 | 14 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 318 | | | 371 | 364 | 159 | 209 | 364 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 318 | | | 371 | 364 | 159 | 209 | 364 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 100 | | | 100 | 99 | 99 | 96 | 97 | 100 |
| cM capacity (veh/h) | 1579 | | | 1196 | | | 529 | 541 | 839 | 695 | 541 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 23 | 159 | 159 | 0 | 12 | 40 |
| Volume Left | 23 | 0 | 0 | 0 | 0 | 26 |
| Volume Right | 0 | 0 | 0 | 0 | 4 | 0 |
| cSH | 1579 | 1700 | 1700 | 1700 | 621 | 632 |
| Volume to Capacity | 0.01 | 0.09 | 0.09 | 0.00 | 0.02 | 0.06 |
| Queue Length 95th (ft) | 1 | 0 | 0 | 0 | 1 | 5 |
| Control Delay (s) | 7.3 | 0.0 | 0.0 | 0.0 | 10.9 | 11.1 |
| Lane LOS | A | | | | B | B |
| Approach Delay (s) | 0.5 | | | | 10.9 | 11.1 |
| Approach LOS | | | | | B | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 1.9 |
| Intersection Capacity Utilization | 23.4% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

20: US 50 WB #3 & Fairgrounds

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Volume (veh/h) | 0 | 0 | 8 | 739 | 6 | 0 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 0 | 9 | 803 | 7 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 0 | 419 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 0 | 419 | 0 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 99 | 99 | 100 | |
| cM capacity (veh/h) | | | 1579 | 544 | 1065 | |

| Direction, Lane # | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|
| Volume Total | 9 | 402 | 402 | 7 |
| Volume Left | 9 | 0 | 0 | 7 |
| Volume Right | 0 | 0 | 0 | 0 |
| cSH | 1579 | 1700 | 1700 | 544 |
| Volume to Capacity | 0.01 | 0.24 | 0.24 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 1 |
| Control Delay (s) | 7.3 | 0.0 | 0.0 | 11.7 |
| Lane LOS | A | | | B |
| Approach Delay (s) | 0.1 | | 11.7 | |
| Approach LOS | | | | B |

| Intersection Summary | | | |
|-----------------------------------|-------|----------------------|---|
| Average Delay | 0.2 | | |
| Intersection Capacity Utilization | 30.4% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

21: US 50 EB #2 & Fairgrounds

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↑↑ | ↗ | | | | | ↖ | | | ↙ | |
| Volume (veh/h) | 0 | 302 | 6 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 8 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 0 | 328 | 7 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 9 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 335 | | | 333 | 328 | 164 | 167 | 335 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 335 | | | 333 | 328 | 164 | 167 | 335 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 99 | 100 | 100 | 98 | 100 |
| cM capacity (veh/h) | 1579 | | | 1179 | | | 575 | 576 | 833 | 758 | 571 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 164 | 164 | 7 | 7 | 9 |
| Volume Left | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 7 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 576 | 571 |
| Volume to Capacity | 0.10 | 0.10 | 0.00 | 0.01 | 0.02 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 1 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 11.3 | 11.4 |
| Lane LOS | | | | B | B |
| Approach Delay (s) | 0.0 | | | 11.3 | 11.4 |
| Approach LOS | | | | B | B |

| Intersection Summary | | |
|-----------------------------------|-------|----------------------|
| Average Delay | | 0.5 |
| Intersection Capacity Utilization | 30.4% | ICU Level of Service |
| Analysis Period (min) | | 15 |
| | | A |

HCM Unsignalized Intersection Capacity Analysis
 22: US 50 EB #2 & KOA

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | | | ↗ |
| Volume (veh/h) | 300 | 3 | 0 | 0 | 0 | 13 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Hourly flow rate (vph) | 349 | 3 | 0 | 0 | 0 | 15 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 352 | | 351 | 176 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 352 | | 351 | 176 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 98 |
| cM capacity (veh/h) | | | 1161 | | 605 | 818 |

| Direction, Lane # | EB 1 | EB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 233 | 120 | 15 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 3 | 15 |
| cSH | 1700 | 1700 | 818 |
| Volume to Capacity | 0.14 | 0.07 | 0.02 |
| Queue Length 95th (ft) | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 9.5 |
| Lane LOS | | | A |
| Approach Delay (s) | 0.0 | | 9.5 |
| Approach LOS | | | A |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.4 | |
| Intersection Capacity Utilization | | 18.4% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

23: US 50 WB #3 & 28 1/2 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | ↙ | ↕ | ↗ | | ↖ | | | ↘ | ↗ |
| Volume (veh/h) | 0 | 0 | 0 | 8 | 677 | 7 | 49 | 56 | 0 | 0 | 18 | 42 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 9 | 769 | 8 | 56 | 64 | 0 | 0 | 20 | 48 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 777 | | | 0 | | | 461 | 795 | 0 | 819 | 788 | 385 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 777 | | | 0 | | | 461 | 795 | 0 | 819 | 788 | 385 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 99 | | | 86 | 79 | 100 | 100 | 93 | 92 |
| cM capacity (veh/h) | 797 | | | 1579 | | | 409 | 306 | 1065 | 215 | 309 | 597 |

| Direction, Lane # | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 9 | 385 | 385 | 8 | 119 | 68 |
| Volume Left | 9 | 0 | 0 | 0 | 56 | 0 |
| Volume Right | 0 | 0 | 0 | 8 | 0 | 48 |
| cSH | 1579 | 1700 | 1700 | 1700 | 346 | 466 |
| Volume to Capacity | 0.01 | 0.23 | 0.23 | 0.00 | 0.34 | 0.15 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 37 | 13 |
| Control Delay (s) | 7.3 | 0.0 | 0.0 | 0.0 | 20.8 | 14.0 |
| Lane LOS | A | | | | C | B |
| Approach Delay (s) | 0.1 | | | | 20.8 | 14.0 |
| Approach LOS | | | | | C | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 3.6 |
| Intersection Capacity Utilization | 37.7% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

24: US 50 EB #2 & 28 1/2 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 36 | 275 | 1 | 0 | 0 | 0 | 0 | 69 | 14 | 8 | 18 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 41 | 312 | 1 | 0 | 0 | 0 | 0 | 78 | 16 | 9 | 20 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 314 | | | 405 | 394 | 156 | 293 | 395 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 314 | | | 405 | 394 | 156 | 293 | 395 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 97 | | | 100 | | | 100 | 85 | 98 | 98 | 96 | 100 |
| cM capacity (veh/h) | 1579 | | | 1201 | | | 491 | 514 | 843 | 528 | 513 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 41 | 156 | 156 | 1 | 94 | 30 |
| Volume Left | 41 | 0 | 0 | 0 | 0 | 9 |
| Volume Right | 0 | 0 | 0 | 1 | 16 | 0 |
| cSH | 1579 | 1700 | 1700 | 1700 | 550 | 518 |
| Volume to Capacity | 0.03 | 0.09 | 0.09 | 0.00 | 0.17 | 0.06 |
| Queue Length 95th (ft) | 2 | 0 | 0 | 0 | 15 | 5 |
| Control Delay (s) | 7.3 | 0.0 | 0.0 | 0.0 | 12.9 | 12.4 |
| Lane LOS | A | | | | B | B |
| Approach Delay (s) | 0.8 | | | | 12.9 | 12.4 |
| Approach LOS | | | | | B | B |

Intersection Summary

| | | | | | | |
|-----------------------------------|--|-------|--|----------------------|--|---|
| Average Delay | | 3.9 | | | | |
| Intersection Capacity Utilization | | 22.3% | | ICU Level of Service | | A |
| Analysis Period (min) | | 15 | | | | |

HCM Unsignalized Intersection Capacity Analysis
 25: US 50 EB #2 & Rainbow Dr

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | ↗ | | | | ↗ |
| Volume (veh/h) | 323 | 3 | 0 | 0 | 0 | 12 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Hourly flow rate (vph) | 385 | 4 | 0 | 0 | 0 | 14 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 388 | | 385 | 192 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 388 | | 385 | 192 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 98 |
| cM capacity (veh/h) | | | 1125 | | 575 | 798 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | NB 1 |
|------------------------|------|------|------|------|
| Volume Total | 192 | 192 | 4 | 14 |
| Volume Left | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 4 | 14 |
| cSH | 1700 | 1700 | 1700 | 798 |
| Volume to Capacity | 0.11 | 0.11 | 0.00 | 0.02 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 9.6 |
| Lane LOS | | | | A |
| Approach Delay (s) | 0.0 | | | 9.6 |
| Approach LOS | | | | A |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.3 | |
| Intersection Capacity Utilization | | 18.9% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis
 26: US 50 WB #3 & Tennessee St

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 690 | 0 | 0 | 3 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 |
| Hourly flow rate (vph) | 0 | 0 | 862 | 0 | 0 | 4 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 862 | | | | 862 | 431 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 862 | | | | 862 | 431 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 99 |
| cM capacity (veh/h) | 738 | | | | 283 | 556 |

| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 575 | 288 | 4 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 4 |
| cSH | 1700 | 1700 | 556 |
| Volume to Capacity | 0.34 | 0.17 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 11.5 |
| Lane LOS | | | B |
| Approach Delay (s) | 0.0 | | 11.5 |
| Approach LOS | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 29.1% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis
 27: US 50 WB #3 & Indiana St

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 680 | 1 | 0 | 0 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Hourly flow rate (vph) | 0 | 0 | 840 | 1 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 841 | | | | 840 | 420 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 841 | | | | 840 | 420 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 753 | | | | 292 | 565 |

| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 560 | 281 | 0 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 1 | 0 |
| cSH | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.33 | 0.17 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | A |
| Approach Delay (s) | 0.0 | | 0.0 |
| Approach LOS | | | A |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 22.2% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis
 28: US 50 WB #3 & Dee Vee Dr

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|-------|------|
| Lane Configurations | | | | ↕↕ | ↕ | |
| Volume (veh/h) | 0 | 0 | 0 | 667 | 1 | 0 |
| Sign Control | Free | | | Free | Yield | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 767 | 1 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 0 | 383 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 0 | 383 | 0 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 100 | 100 | 100 | |
| cM capacity (veh/h) | | | 1579 | 576 | 1065 | |

| Direction, Lane # | WB 1 | WB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 256 | 511 | 1 |
| Volume Left | 0 | 0 | 1 |
| Volume Right | 0 | 0 | 0 |
| cSH | 1579 | 1700 | 576 |
| Volume to Capacity | 0.00 | 0.30 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 11.3 |
| Lane LOS | B | | |
| Approach Delay (s) | 0.0 | | 11.3 |
| Approach LOS | B | | |

| Intersection Summary | | | |
|-----------------------------------|-------|----------------------|---|
| Average Delay | 0.0 | | |
| Intersection Capacity Utilization | 28.4% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

29: US 50 EB #2 & Dee Vee Dr

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Lane Configurations | | ↔↔ | | | | | | ↔ | | | ↔ | |
| Volume (veh/h) | 1 | 337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Yield | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Hourly flow rate (vph) | 1 | 387 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 387 | | | 390 | 390 | 194 | 196 | 390 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 387 | | | 390 | 390 | 194 | 196 | 390 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1579 | | | 1126 | | | 529 | 530 | 797 | 729 | 530 | 1065 |

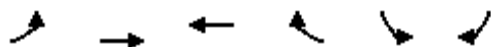
| Direction, Lane # | EB 1 | EB 2 | NB 1 | SB 1 |
|------------------------|------|------|------|------|
| Volume Total | 195 | 194 | 0 | 1 |
| Volume Left | 1 | 0 | 0 | 1 |
| Volume Right | 0 | 0 | 0 | 0 |
| cSH | 1579 | 1700 | 1700 | 729 |
| Volume to Capacity | 0.00 | 0.11 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 9.9 |
| Lane LOS | A | | A | A |
| Approach Delay (s) | 0.0 | | 0.0 | 9.9 |
| Approach LOS | | | A | A |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.1 | |
| Intersection Capacity Utilization | | 19.3% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

30: US 50 WB #3 & Elm Dr

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 667 | 0 | 0 | 4 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Hourly flow rate (vph) | 0 | 0 | 794 | 0 | 0 | 5 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 794 | | | | 794 | 397 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 794 | | | | 794 | 397 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 99 |
| cM capacity (veh/h) | 785 | | | | 313 | 586 |

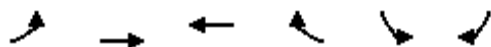
| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 529 | 265 | 5 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 5 |
| cSH | 1700 | 1700 | 586 |
| Volume to Capacity | 0.31 | 0.16 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 11.2 |
| Lane LOS | | | B |
| Approach Delay (s) | 0.0 | | 11.2 |
| Approach LOS | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|----------------------|
| Average Delay | | 0.1 | |
| Intersection Capacity Utilization | | 28.4% | ICU Level of Service |
| Analysis Period (min) | | 15 | A |

HCM Unsignalized Intersection Capacity Analysis

31: US 50 WB #3 & Reta Dr

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 668 | 0 | 0 | 2 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 0 | 726 | 0 | 0 | 2 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | 389 | | | |
| pX, platoon unblocked | 0.91 | | | | 0.91 | 0.91 |
| vC, conflicting volume | 726 | | | | 726 | 363 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 499 | | | | 499 | 100 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 927 | | | | 442 | 834 |

| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 484 | 242 | 2 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 2 |
| cSH | 1700 | 1700 | 834 |
| Volume to Capacity | 0.28 | 0.14 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 9.3 |
| Lane LOS | | | A |
| Approach Delay (s) | 0.0 | | 9.3 |
| Approach LOS | | | A |

| Intersection Summary | | | |
|-----------------------------------|--|-------|----------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 28.5% | ICU Level of Service |
| Analysis Period (min) | | 15 | A |

HCM Unsignalized Intersection Capacity Analysis

32: US 50 EB #2 &

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBR | NBR2 | SWL | SWR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | |
| Volume (veh/h) | 73 | 239 | 4 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| Sign Control | | Free | | | Free | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | 0% | | | 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 |
| Hourly flow rate (vph) | 79 | 260 | 4 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| Pedestrians | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | |
| Median storage (veh) | | | | | | | | | | | |
| Upstream signal (ft) | | | | | 424 | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 264 | | | 418 | 418 | 130 | 423 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 264 | | | 418 | 418 | 130 | 423 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 4.1 | 3.4 |
| p0 queue free % | 95 | | | 100 | | | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1579 | | | 1254 | | | 485 | 485 | 877 | 482 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | NB 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 79 | 130 | 130 | 4 | 3 |
| Volume Left | 79 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 4 | 3 |
| cSH | 1579 | 1700 | 1700 | 1700 | 877 |
| Volume to Capacity | 0.05 | 0.08 | 0.08 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 4 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 7.4 | 0.0 | 0.0 | 0.0 | 9.1 |
| Lane LOS | A | | | | A |
| Approach Delay (s) | 1.7 | | | | 9.1 |
| Approach LOS | | | | | A |

| Intersection Summary | | |
|-----------------------------------|-------|----------------------|
| Average Delay | | 1.8 |
| Intersection Capacity Utilization | 16.6% | ICU Level of Service |
| Analysis Period (min) | | 15 |
| | | A |

HCM Unsignalized Intersection Capacity Analysis
 38: US 50 EB #2 & Redrock Rd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | | | ↗ |
| Volume (veh/h) | 288 | 4 | 0 | 0 | 0 | 8 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 324 | 4 | 0 | 0 | 0 | 9 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 595 | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 328 | | 326 | 164 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 328 | | 326 | 164 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 99 |
| cM capacity (veh/h) | | | 1186 | | 627 | 833 |

| Direction, Lane # | EB 1 | EB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 216 | 112 | 9 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 4 | 9 |
| cSH | 1700 | 1700 | 833 |
| Volume to Capacity | 0.13 | 0.07 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 9.4 |
| Lane LOS | | | A |
| Approach Delay (s) | 0.0 | | 9.4 |
| Approach LOS | | | A |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.2 | |
| Intersection Capacity Utilization | | 18.1% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

39: US 50 WB #3 & 29 1/4 Rd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|-------|------|
| Lane Configurations | | | | ↕↕ | ↗ | |
| Volume (veh/h) | 0 | 0 | 0 | 653 | 18 | 0 |
| Sign Control | Free | | | Free | Yield | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 742 | 20 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 1002 | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 0 | 371 | | 0 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 0 | 371 | | 0 |
| tC, single (s) | | | 4.3 | 7.0 | | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | | 3.4 |
| p0 queue free % | | | 100 | 97 | | 100 |
| cM capacity (veh/h) | | | 1579 | 587 | | 1065 |

| Direction, Lane # | WB 1 | WB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 247 | 495 | 20 |
| Volume Left | 0 | 0 | 20 |
| Volume Right | 0 | 0 | 0 |
| cSH | 1579 | 1700 | 587 |
| Volume to Capacity | 0.00 | 0.29 | 0.03 |
| Queue Length 95th (ft) | 0 | 0 | 3 |
| Control Delay (s) | 0.0 | 0.0 | 11.4 |
| Lane LOS | B | | |
| Approach Delay (s) | 0.0 | 11.4 | |
| Approach LOS | B | | |

| Intersection Summary | | | |
|-----------------------------------|-------|----------------------|---|
| Average Delay | 0.3 | | |
| Intersection Capacity Utilization | 39.9% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

40: US 50 EB #2 & 29 1/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Lane Configurations | | ↔↔ | | | | | | ↔ | | | ↔ | |
| Volume (veh/h) | 0 | 292 | 7 | 0 | 0 | 0 | 0 | 18 | 2 | 0 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Yield | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 0 | 332 | 8 | 0 | 0 | 0 | 0 | 20 | 2 | 0 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | 969 | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 340 | | | 336 | 336 | 170 | 178 | 340 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 340 | | | 336 | 336 | 170 | 178 | 340 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 96 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1579 | | | 1174 | | | 579 | 570 | 826 | 728 | 567 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | NB 1 | SB 1 |
|------------------------|------|------|------|------|
| Volume Total | 166 | 174 | 23 | 0 |
| Volume Left | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 8 | 2 | 0 |
| cSH | 1579 | 1700 | 588 | 1700 |
| Volume to Capacity | 0.00 | 0.10 | 0.04 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 3 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 11.4 | 0.0 |
| Lane LOS | | | B | A |
| Approach Delay (s) | 0.0 | | 11.4 | 0.0 |
| Approach LOS | | | B | A |

| Intersection Summary | | | |
|-----------------------------------|-------|-----|----------------------|
| Average Delay | | 0.7 | |
| Intersection Capacity Utilization | 28.1% | | ICU Level of Service |
| Analysis Period (min) | 15 | | A |

HCM Unsignalized Intersection Capacity Analysis

41: US 50 #4 & 29 1/2 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ | | ↕ | | | ↕ | |
| Volume (veh/h) | 7 | 289 | 2 | 0 | 540 | 2 | 35 | 1 | 3 | 6 | 0 | 65 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly flow rate (vph) | 8 | 321 | 2 | 0 | 600 | 2 | 39 | 1 | 3 | 7 | 0 | 72 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 602 | | | 323 | | | 709 | 939 | 161 | 777 | 939 | 300 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 602 | | | 323 | | | 709 | 939 | 161 | 777 | 939 | 300 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 100 | | | 86 | 100 | 100 | 98 | 100 | 89 |
| cM capacity (veh/h) | 931 | | | 1191 | | | 275 | 250 | 837 | 273 | 250 | 679 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 8 | 161 | 161 | 2 | 0 | 300 | 300 | 2 | 43 | 79 |
| Volume Left | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 7 |
| Volume Right | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 3 | 72 |
| cSH | 931 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 290 | 603 |
| Volume to Capacity | 0.01 | 0.09 | 0.09 | 0.00 | 0.00 | 0.18 | 0.18 | 0.00 | 0.15 | 0.13 |
| Queue Length 95th (ft) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 11 |
| Control Delay (s) | 8.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.6 | 11.9 |
| Lane LOS | A | | | | | | | | C | B |
| Approach Delay (s) | 0.2 | | | | 0.0 | | | | 19.6 | 11.9 |
| Approach LOS | | | | | | | | | C | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 1.8 |
| Intersection Capacity Utilization | 30.4% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

42: US 50 #4 & 29 3/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | ↘ | ↖ | ↗ | ↘ | | ↕ | | | ↕ | |
| Volume (veh/h) | 8 | 275 | 7 | 6 | 516 | 3 | 24 | 0 | 6 | 2 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 9 | 309 | 8 | 7 | 580 | 3 | 27 | 0 | 7 | 2 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 583 | | | 317 | | | 630 | 924 | 154 | 772 | 928 | 290 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 583 | | | 317 | | | 630 | 924 | 154 | 772 | 928 | 290 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 99 | | | 92 | 100 | 99 | 99 | 100 | 100 |
| cM capacity (veh/h) | 947 | | | 1198 | | | 350 | 254 | 845 | 273 | 252 | 689 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 9 | 154 | 154 | 8 | 7 | 290 | 290 | 3 | 34 | 2 |
| Volume Left | 9 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 27 | 2 |
| Volume Right | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 3 | 7 | 0 |
| cSH | 947 | 1700 | 1700 | 1700 | 1198 | 1700 | 1700 | 1700 | 396 | 273 |
| Volume to Capacity | 0.01 | 0.09 | 0.09 | 0.00 | 0.01 | 0.17 | 0.17 | 0.00 | 0.09 | 0.01 |
| Queue Length 95th (ft) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 |
| Control Delay (s) | 8.8 | 0.0 | 0.0 | 0.0 | 8.0 | 0.0 | 0.0 | 0.0 | 14.9 | 18.3 |
| Lane LOS | A | | | | A | | | | B | C |
| Approach Delay (s) | 0.2 | | | | 0.1 | | | | 14.9 | 18.3 |
| Approach LOS | | | | | | | | | B | C |

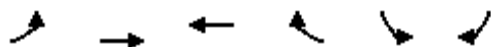
Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.7 |
| Intersection Capacity Utilization | 24.3% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

43: US 50 #4 & 30 Rd

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↑↑ | ↑↑ | ↘ | ↙ | |
| Volume (veh/h) | 4 | 268 | 520 | 2 | 0 | 7 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 4 | 301 | 584 | 2 | 0 | 8 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 587 | | | | 744 | 292 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 587 | | | | 744 | 292 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 99 |
| cM capacity (veh/h) | 944 | | | | 336 | 687 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | SB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 4 | 151 | 151 | 292 | 292 | 2 | 8 |
| Volume Left | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 2 | 8 |
| cSH | 944 | 1700 | 1700 | 1700 | 1700 | 1700 | 687 |
| Volume to Capacity | 0.00 | 0.09 | 0.09 | 0.17 | 0.17 | 0.00 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Control Delay (s) | 8.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.3 |
| Lane LOS | A | | | | | | B |
| Approach Delay (s) | 0.1 | | | 0.0 | | | 10.3 |
| Approach LOS | | | | | | | B |

| Intersection Summary | | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|--|---|
| Average Delay | | | 0.1 | | | | |
| Intersection Capacity Utilization | | | 24.4% | | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | | |

HCM Unsignalized Intersection Capacity Analysis
 44: US 50 #4 & S Frontage Rd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | ↵ | ↑↑ | ↵ | |
| Volume (veh/h) | 270 | 0 | 2 | 538 | 4 | 6 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 303 | 0 | 2 | 604 | 4 | 7 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 303 | | 610 | 152 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 303 | | 610 | 152 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 99 | 99 |
| cM capacity (veh/h) | | | 1212 | | 412 | 849 |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 202 | 101 | 2 | 302 | 302 | 11 |
| Volume Left | 0 | 0 | 2 | 0 | 0 | 4 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 7 |
| cSH | 1700 | 1700 | 1212 | 1700 | 1700 | 596 |
| Volume to Capacity | 0.12 | 0.06 | 0.00 | 0.18 | 0.18 | 0.02 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 8.0 | 0.0 | 0.0 | 11.2 |
| Lane LOS | | | A | | | B |
| Approach Delay (s) | 0.0 | | 0.0 | | | 11.2 |
| Approach LOS | | | | | | B |

| Intersection Summary | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|---|
| Average Delay | | | 0.2 | | | |
| Intersection Capacity Utilization | | | 24.9% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

45: US 50 #4 & 31 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | ↘ | ↖ | ↗ | ↘ | | ↖ | ↗ | | ↕ | |
| Volume (veh/h) | 7 | 263 | 1 | 5 | 518 | 24 | 2 | 0 | 14 | 20 | 0 | 3 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly flow rate (vph) | 8 | 292 | 1 | 6 | 576 | 27 | 2 | 0 | 16 | 22 | 0 | 3 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | 2 | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 602 | | | 292 | | | 610 | 921 | 146 | 748 | 894 | 288 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 602 | | | 292 | | | 610 | 921 | 146 | 748 | 894 | 288 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 100 | | | 99 | 100 | 98 | 92 | 100 | 100 |
| cM capacity (veh/h) | 931 | | | 1224 | | | 361 | 255 | 856 | 282 | 265 | 691 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 8 | 146 | 146 | 1 | 6 | 288 | 288 | 27 | 18 | 26 |
| Volume Left | 8 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 22 |
| Volume Right | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 27 | 16 | 3 |
| cSH | 931 | 1700 | 1700 | 1700 | 1224 | 1700 | 1700 | 1700 | 978 | 306 |
| Volume to Capacity | 0.01 | 0.09 | 0.09 | 0.00 | 0.00 | 0.17 | 0.17 | 0.02 | 0.02 | 0.08 |
| Queue Length 95th (ft) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| Control Delay (s) | 8.9 | 0.0 | 0.0 | 0.0 | 8.0 | 0.0 | 0.0 | 0.0 | 10.0 | 17.9 |
| Lane LOS | A | | | | A | | | | B | C |
| Approach Delay (s) | 0.2 | | | | 0.1 | | | | 10.0 | 17.9 |
| Approach LOS | | | | | | | | | B | C |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.8 |
| Intersection Capacity Utilization | 28.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

47: US 50 #7 & CDOT

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | ↑ | ↵ | ↑↑↑ | ↵ | |
| Volume (veh/h) | 376 | 13 | 0 | 626 | 0 | 5 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Hourly flow rate (vph) | 392 | 14 | 0 | 652 | 0 | 5 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 405 | | 609 | 196 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 405 | | 609 | 196 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 99 |
| cM capacity (veh/h) | | | 1108 | | 413 | 794 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 196 | 196 | 14 | 0 | 217 | 217 | 217 | 5 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 5 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 794 |
| Volume to Capacity | 0.12 | 0.12 | 0.01 | 0.00 | 0.13 | 0.13 | 0.13 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6 |
| Lane LOS | | | | | | | | A |
| Approach Delay (s) | 0.0 | | | 0.0 | | | | 9.6 |
| Approach LOS | | | | | | | | A |

| Intersection Summary | | | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|--|--|---|
| Average Delay | | | 0.0 | | | | | |
| Intersection Capacity Utilization | | | 22.1% | | ICU Level of Service | | | A |
| Analysis Period (min) | | | 15 | | | | | |

HCM Unsignalized Intersection Capacity Analysis

48: US 50 #7 & Willow Bend Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | ↘ | ↖ | ↗ | ↘ | | ↕ | | | ↕ | |
| Volume (veh/h) | 0 | 367 | 0 | 1 | 622 | 0 | 12 | 0 | 1 | 0 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Hourly flow rate (vph) | 0 | 432 | 0 | 1 | 732 | 0 | 14 | 0 | 1 | 0 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 732 | | | 432 | | | 800 | 1166 | 216 | 950 | 1166 | 366 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 732 | | | 432 | | | 800 | 1166 | 216 | 950 | 1166 | 366 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 95 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 830 | | | 1083 | | | 266 | 184 | 771 | 205 | 184 | 614 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 0 | 216 | 216 | 0 | 1 | 366 | 366 | 0 | 15 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 14 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1083 | 1700 | 1700 | 1700 | 280 | 1700 |
| Volume to Capacity | 0.00 | 0.13 | 0.13 | 0.00 | 0.00 | 0.22 | 0.22 | 0.00 | 0.05 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 8.3 | 0.0 | 0.0 | 0.0 | 18.6 | 0.0 |
| Lane LOS | | | | | A | | | | C | A |
| Approach Delay (s) | 0.0 | | | | 0.0 | | | | 18.6 | 0.0 |
| Approach LOS | | | | | | | | | C | A |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.2 |
| Intersection Capacity Utilization | 27.2% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

49: US 50 #7 & 3247

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Volume (veh/h) | 3 | 364 | 0 | 0 | 628 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Hourly flow rate (vph) | 4 | 428 | 0 | 0 | 739 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 739 | | | 428 | | | 805 | 1174 | 214 | 960 | 1174 | 369 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 739 | | | 428 | | | 805 | 1174 | 214 | 960 | 1174 | 369 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 825 | | | 1086 | | | 263 | 181 | 773 | 202 | 181 | 611 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 4 | 285 | 143 | 0 | 493 | 246 | 1 | 0 |
| Volume Left | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| cSH | 825 | 1700 | 1700 | 1700 | 1700 | 1700 | 263 | 1700 |
| Volume to Capacity | 0.00 | 0.17 | 0.08 | 0.00 | 0.29 | 0.14 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 9.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.8 | 0.0 |
| Lane LOS | A | | | | | | C | A |
| Approach Delay (s) | 0.1 | | | 0.0 | | | 18.8 | 0.0 |
| Approach LOS | | | | | | | C | A |

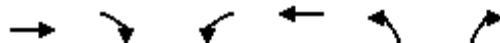
Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.0 |
| Intersection Capacity Utilization | 27.4% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

50: US 50 #7 & 1st St

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | ↑ | ↓ | ↑↑ | ↓ | |
| Volume (veh/h) | 364 | 2 | 0 | 622 | 6 | 7 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Hourly flow rate (vph) | 428 | 2 | 0 | 732 | 7 | 8 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 431 | | 794 | 214 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 431 | | 794 | 214 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 98 | 99 |
| cM capacity (veh/h) | | | 1084 | | 313 | 773 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 214 | 214 | 2 | 0 | 366 | 366 | 15 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Volume Right | 0 | 0 | 2 | 0 | 0 | 0 | 8 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 461 |
| Volume to Capacity | 0.13 | 0.13 | 0.00 | 0.00 | 0.22 | 0.22 | 0.03 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.1 |
| Lane LOS | | | | | | | B |
| Approach Delay (s) | 0.0 | | | 0.0 | | | 13.1 |
| Approach LOS | | | | | | | B |

| Intersection Summary | | | |
|-----------------------------------|-------|--|----------------------|
| Average Delay | | | 0.2 |
| Intersection Capacity Utilization | 27.2% | | ICU Level of Service |
| Analysis Period (min) | 15 | | A |

HCM Unsignalized Intersection Capacity Analysis

51: US 50 #7 & 3rd St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | ↘ | ↖ | ↗ | ↘ | | ↕ | | | ↕ | |
| Volume (veh/h) | 30 | 341 | 0 | 1 | 527 | 0 | 0 | 0 | 0 | 5 | 0 | 83 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Hourly flow rate (vph) | 34 | 392 | 0 | 1 | 606 | 0 | 0 | 0 | 0 | 6 | 0 | 95 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 606 | | | 392 | | | 861 | 1069 | 196 | 873 | 1069 | 303 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 606 | | | 392 | | | 861 | 1069 | 196 | 873 | 1069 | 303 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 96 | | | 100 | | | 100 | 100 | 100 | 97 | 100 | 86 |
| cM capacity (veh/h) | 928 | | | 1121 | | | 200 | 203 | 794 | 228 | 203 | 676 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 34 | 196 | 196 | 0 | 1 | 303 | 303 | 0 | 0 | 101 |
| Volume Left | 34 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 |
| cSH | 928 | 1700 | 1700 | 1700 | 1121 | 1700 | 1700 | 1700 | 1700 | 608 |
| Volume to Capacity | 0.04 | 0.12 | 0.12 | 0.00 | 0.00 | 0.18 | 0.18 | 0.00 | 0.00 | 0.17 |
| Queue Length 95th (ft) | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| Control Delay (s) | 9.0 | 0.0 | 0.0 | 0.0 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 12.1 |
| Lane LOS | A | | | | A | | | | A | B |
| Approach Delay (s) | 0.7 | | | | 0.0 | | | | 0.0 | 12.1 |
| Approach LOS | | | | | | | | | A | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 1.4 |
| Intersection Capacity Utilization | 33.3% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis
 52: US 50 #7 & SH 141A

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR | |
|------------------------|------|------|------|------|------|------|-----|
| Lane Configurations | ↑↑ | ↑ | ↵ | ↑↑ | ↵ | | |
| Volume (veh/h) | 286 | 63 | 5 | 450 | 68 | 3 | |
| Sign Control | Free | | | Free | Stop | | |
| Grade | 0% | | | 0% | 0% | | |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | |
| Hourly flow rate (vph) | 345 | 76 | 6 | 542 | 82 | 4 | |
| Pedestrians | | | | | | | |
| Lane Width (ft) | | | | | | | |
| Walking Speed (ft/s) | | | | | | | |
| Percent Blockage | | | | | | | |
| Right turn flare (veh) | | | | | | | |
| Median type | None | | | None | | | |
| Median storage (veh) | | | | | | | |
| Upstream signal (ft) | | | | | | | |
| pX, platoon unblocked | | | | | | | |
| vC, conflicting volume | | | 420 | | | 628 | 172 |
| vC1, stage 1 conf vol | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | |
| vCu, unblocked vol | | | 420 | | | 628 | 172 |
| tC, single (s) | | | 4.3 | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | | |
| tF (s) | | | 2.3 | | | 3.6 | 3.4 |
| p0 queue free % | | | 99 | | | 79 | 100 |
| cM capacity (veh/h) | | | 1094 | | | 399 | 823 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 172 | 172 | 76 | 6 | 271 | 271 | 86 |
| Volume Left | 0 | 0 | 0 | 6 | 0 | 0 | 82 |
| Volume Right | 0 | 0 | 76 | 0 | 0 | 0 | 4 |
| cSH | 1700 | 1700 | 1700 | 1094 | 1700 | 1700 | 408 |
| Volume to Capacity | 0.10 | 0.10 | 0.04 | 0.01 | 0.16 | 0.16 | 0.21 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 8.3 | 0.0 | 0.0 | 16.1 |
| Lane LOS | | | | A | C | | |
| Approach Delay (s) | 0.0 | | 0.1 | | 16.1 | | |
| Approach LOS | | | | C | | | |

| Intersection Summary | | | |
|-----------------------------------|-------|--|----------------------|
| Average Delay | | | 1.4 |
| Intersection Capacity Utilization | 23.1% | | ICU Level of Service |
| Analysis Period (min) | | | 15 |
| A | | | |

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

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Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

HCM Signalized Intersection Capacity Analysis

4: US 50 #1 & Unawweep Ave

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|-------|------|------|------|------|------|-------|-------|
| Lane Configurations | ↖ | ↗ | ↘ | ↖ | ↗ | ↘ | | ↖ | ↗ | | ↖ | ↗ |
| Volume (vph) | 189 | 525 | 6 | 1 | 1244 | 0 | 10 | 1 | 2 | 13 | 3 | 221 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | | 5.0 | 5.0 | | 5.0 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | | 0.96 | 1.00 | | 0.96 | 1.00 |
| Satd. Flow (prot) | 1671 | 3343 | 1495 | 1671 | 3343 | | | 1682 | 1495 | | 1690 | 1495 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | | 0.83 | 1.00 | | 0.79 | 1.00 |
| Satd. Flow (perm) | 1671 | 3343 | 1495 | 1671 | 3343 | | | 1466 | 1495 | | 1395 | 1495 |
| Peak-hour factor, PHF | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 203 | 565 | 6 | 1 | 1338 | 0 | 11 | 1 | 2 | 14 | 3 | 238 |
| RTOR Reduction (vph) | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 203 | 565 | 5 | 1 | 1338 | 0 | 0 | 12 | 0 | 0 | 17 | 238 |
| Turn Type | Prot | | Perm | Prot | | Perm | Perm | | Perm | Perm | | Over |
| Protected Phases | 1 | 6 | | 5 | 2 | | | 4 | | | 4 | 1 |
| Permitted Phases | | | 6 | | | 2 | 4 | | 4 | 4 | | |
| Actuated Green, G (s) | 29.3 | 79.3 | 79.3 | 1.1 | 51.1 | | | 4.6 | 4.6 | | 4.6 | 29.3 |
| Effective Green, g (s) | 29.3 | 79.3 | 79.3 | 1.1 | 51.1 | | | 4.6 | 4.6 | | 4.6 | 29.3 |
| Actuated g/C Ratio | 0.29 | 0.79 | 0.79 | 0.01 | 0.51 | | | 0.05 | 0.05 | | 0.05 | 0.29 |
| Clearance Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | | 5.0 | 5.0 | | 5.0 | 4.0 |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | 2.5 | 3.5 | | | 3.0 | 3.0 | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 490 | 2651 | 1186 | 18 | 1708 | | | 67 | 69 | | 64 | 438 |
| v/s Ratio Prot | 0.12 | 0.17 | | 0.00 | c0.40 | | | | | | | c0.16 |
| v/s Ratio Perm | | | 0.00 | | | | | 0.01 | 0.00 | | c0.01 | |
| v/c Ratio | 0.41 | 0.21 | 0.00 | 0.06 | 0.78 | | | 0.18 | 0.00 | | 0.27 | 0.54 |
| Uniform Delay, d1 | 28.4 | 2.6 | 2.1 | 48.9 | 19.9 | | | 45.9 | 45.5 | | 46.1 | 29.7 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.6 | 0.2 | 0.0 | 0.9 | 3.7 | | | 1.3 | 0.0 | | 2.2 | 1.4 |
| Delay (s) | 29.0 | 2.8 | 2.2 | 49.9 | 23.6 | | | 47.2 | 45.5 | | 48.3 | 31.1 |
| Level of Service | C | A | A | D | C | | | D | D | | D | C |
| Approach Delay (s) | | 9.6 | | | 23.6 | | | 46.9 | | | 32.3 | |
| Approach LOS | | A | | | C | | | D | | | C | |

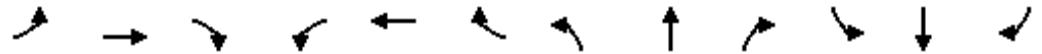
Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 20.1 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.67 | | |
| Actuated Cycle Length (s) | 100.0 | Sum of lost time (s) | 15.0 |
| Intersection Capacity Utilization | 64.9% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

13: US 50 #1 & 27 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|-------|------|------|-------|-------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 36 | 435 | 24 | 27 | 1047 | 22 | 139 | 20 | 15 | 27 | 29 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 7.0 | 7.0 | 4.0 | 7.0 | 7.0 | | 5.5 | 5.5 | | 5.5 | 5.5 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | | 1.00 | 0.85 | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | 0.96 | 1.00 | | 0.98 | 1.00 |
| Satd. Flow (prot) | 1671 | 3343 | 1495 | 1671 | 3343 | 1495 | | 1686 | 1495 | | 1718 | 1495 |
| Flt Permitted | 0.19 | 1.00 | 1.00 | 0.48 | 1.00 | 1.00 | | 0.71 | 1.00 | | 0.80 | 1.00 |
| Satd. Flow (perm) | 339 | 3343 | 1495 | 842 | 3343 | 1495 | | 1247 | 1495 | | 1413 | 1495 |
| Peak-hour factor, PHF | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 40 | 478 | 26 | 30 | 1151 | 24 | 153 | 22 | 16 | 30 | 32 | 35 |
| RTOR Reduction (vph) | 0 | 0 | 10 | 0 | 0 | 5 | 0 | 0 | 12 | 0 | 0 | 28 |
| Lane Group Flow (vph) | 40 | 478 | 16 | 30 | 1151 | 19 | 0 | 175 | 4 | 0 | 62 | 7 |
| Turn Type | pm+pt | | Perm | pm+pt | | Perm | Perm | | Perm | Perm | | Perm |
| Protected Phases | 1 | 6 | | 5 | 2 | | | 4 | | | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | 4 | | 4 | 8 | | 8 |
| Actuated Green, G (s) | 64.3 | 60.7 | 60.7 | 63.9 | 60.5 | 60.5 | | 19.4 | 19.4 | | 19.4 | 19.4 |
| Effective Green, g (s) | 64.3 | 60.7 | 60.7 | 63.9 | 60.5 | 60.5 | | 19.4 | 19.4 | | 19.4 | 19.4 |
| Actuated g/C Ratio | 0.64 | 0.61 | 0.61 | 0.64 | 0.60 | 0.60 | | 0.19 | 0.19 | | 0.19 | 0.19 |
| Clearance Time (s) | 4.0 | 7.0 | 7.0 | 4.0 | 7.0 | 7.0 | | 5.5 | 5.5 | | 5.5 | 5.5 |
| Vehicle Extension (s) | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | | 3.0 | 3.0 | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 266 | 2029 | 907 | 566 | 2023 | 904 | | 242 | 290 | | 274 | 290 |
| v/s Ratio Prot | c0.01 | 0.14 | | 0.00 | c0.34 | | | | | | | |
| v/s Ratio Perm | 0.09 | | 0.01 | 0.03 | | 0.01 | | c0.14 | 0.00 | | 0.04 | 0.00 |
| v/c Ratio | 0.15 | 0.24 | 0.02 | 0.05 | 0.57 | 0.02 | | 0.72 | 0.01 | | 0.23 | 0.02 |
| Uniform Delay, d1 | 7.5 | 9.0 | 7.8 | 6.6 | 11.9 | 7.9 | | 37.8 | 32.6 | | 34.0 | 32.6 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.1 | 0.3 | 0.0 | 0.0 | 1.2 | 0.0 | | 10.2 | 0.0 | | 0.4 | 0.0 |
| Delay (s) | 7.6 | 9.3 | 7.8 | 6.7 | 13.1 | 7.9 | | 48.0 | 32.6 | | 34.4 | 32.7 |
| Level of Service | A | A | A | A | B | A | | D | C | | C | C |
| Approach Delay (s) | | 9.1 | | | 12.8 | | | 46.7 | | | 33.8 | |
| Approach LOS | | A | | | B | | | D | | | C | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 16.0 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.59 | | |
| Actuated Cycle Length (s) | 100.0 | Sum of lost time (s) | 16.5 |
| Intersection Capacity Utilization | 57.7% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

33: US 50 WB #3 & 29 Rd

10/28/2008



| Movement | WBT | WBR | SBT | SBR2 | NEL |
|------------------------|-------|------|-------|------|-------|
| Lane Configurations | ↑↑ | ↑ | ↑↑ | ↑ | ↑ |
| Volume (vph) | 574 | 68 | 51 | 91 | 73 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 9.0 | 9.0 | 6.5 | 6.5 | 6.0 |
| Lane Util. Factor | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 |
| Frt | 1.00 | 0.85 | 1.00 | 0.85 | 1.00 |
| Flt Protected | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 |
| Satd. Flow (prot) | 3343 | 1495 | 3343 | 1495 | 1671 |
| Flt Permitted | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 |
| Satd. Flow (perm) | 3343 | 1495 | 3343 | 1495 | 1671 |
| Peak-hour factor, PHF | 0.91 | 0.91 | 0.91 | 0.91 | 0.92 |
| Adj. Flow (vph) | 631 | 75 | 56 | 100 | 79 |
| RTOR Reduction (vph) | 0 | 32 | 0 | 90 | 0 |
| Lane Group Flow (vph) | 631 | 43 | 56 | 10 | 79 |
| Turn Type | | Perm | | Perm | |
| Protected Phases | 6 | | 4 | | 5 |
| Permitted Phases | | 6 | | 4 | |
| Actuated Green, G (s) | 52.0 | 52.0 | 8.8 | 8.8 | 7.7 |
| Effective Green, g (s) | 52.0 | 52.0 | 8.8 | 8.8 | 7.7 |
| Actuated g/C Ratio | 0.58 | 0.58 | 0.10 | 0.10 | 0.09 |
| Clearance Time (s) | 9.0 | 9.0 | 6.5 | 6.5 | 6.0 |
| Vehicle Extension (s) | 4.0 | 4.0 | 6.0 | 6.0 | 2.0 |
| Lane Grp Cap (vph) | 1932 | 864 | 327 | 146 | 143 |
| v/s Ratio Prot | c0.19 | | c0.02 | | c0.05 |
| v/s Ratio Perm | | 0.03 | | 0.01 | |
| v/c Ratio | 0.33 | 0.05 | 0.17 | 0.07 | 0.55 |
| Uniform Delay, d1 | 9.9 | 8.3 | 37.3 | 36.9 | 39.5 |
| Progression Factor | 1.82 | 3.87 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.4 | 0.1 | 0.7 | 0.5 | 2.6 |
| Delay (s) | 18.4 | 32.1 | 38.0 | 37.4 | 42.1 |
| Level of Service | B | C | D | D | D |
| Approach Delay (s) | 19.9 | | 37.6 | | 42.1 |
| Approach LOS | B | | D | | D |

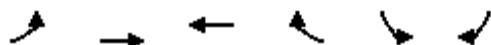
Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 24.7 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.33 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 21.5 |
| Intersection Capacity Utilization | 43.8% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

34: US 50 EB #2 & 29 Rd

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|-------|------|------|-------|------|
| Lane Configurations | | ↑↑ | | | ↑↑ | |
| Volume (vph) | 0 | 239 | 0 | 0 | 51 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 6.0 | | | 6.5 | |
| Lane Util. Factor | | 0.95 | | | 0.97 | |
| Frt | | 1.00 | | | 1.00 | |
| Flt Protected | | 1.00 | | | 0.95 | |
| Satd. Flow (prot) | | 3343 | | | 3242 | |
| Flt Permitted | | 1.00 | | | 0.95 | |
| Satd. Flow (perm) | | 3343 | | | 3242 | |
| Peak-hour factor, PHF | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 0 | 263 | 0 | 0 | 56 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 51 | 0 |
| Lane Group Flow (vph) | 0 | 263 | 0 | 0 | 5 | 0 |
| Turn Type | | | | | | |
| Protected Phases | | 2 | | | 4 | |
| Permitted Phases | | | | | | |
| Actuated Green, G (s) | | 68.7 | | | 8.8 | |
| Effective Green, g (s) | | 68.7 | | | 8.8 | |
| Actuated g/C Ratio | | 0.76 | | | 0.10 | |
| Clearance Time (s) | | 6.0 | | | 6.5 | |
| Vehicle Extension (s) | | 3.0 | | | 6.0 | |
| Lane Grp Cap (vph) | | 2552 | | | 317 | |
| v/s Ratio Prot | | c0.08 | | | c0.00 | |
| v/s Ratio Perm | | | | | | |
| v/c Ratio | | 0.10 | | | 0.02 | |
| Uniform Delay, d1 | | 2.7 | | | 36.7 | |
| Progression Factor | | 1.00 | | | 1.00 | |
| Incremental Delay, d2 | | 0.1 | | | 0.1 | |
| Delay (s) | | 2.8 | | | 36.8 | |
| Level of Service | | A | | | D | |
| Approach Delay (s) | | 2.8 | 0.0 | | 36.8 | |
| Approach LOS | | A | A | | D | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 8.8 | HCM Level of Service | A |
| HCM Volume to Capacity ratio | 0.09 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 12.5 |
| Intersection Capacity Utilization | 26.3% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

35: US 50 WB #3 & Sundance Dr

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|-----------------------------------|------|------|------|-------|-------|------|
| Lane Configurations | | | | ↑↑ | ↗ | |
| Volume (vph) | 0 | 0 | 0 | 662 | 35 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | | | 6.0 | 6.0 | |
| Lane Util. Factor | | | | 0.95 | 1.00 | |
| Fr _t | | | | 1.00 | 1.00 | |
| Fl _t Protected | | | | 1.00 | 0.95 | |
| Satd. Flow (prot) | | | | 3343 | 1671 | |
| Fl _t Permitted | | | | 1.00 | 0.95 | |
| Satd. Flow (perm) | | | | 3343 | 1671 | |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 0 | 0 | 0 | 736 | 39 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 32 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 0 | 736 | 7 | 0 |
| Turn Type | | | | | | |
| Protected Phases | | | | 6 | 5 8 | |
| Permitted Phases | | | | | | |
| Actuated Green, G (s) | | | | 61.3 | 16.7 | |
| Effective Green, g (s) | | | | 61.3 | 16.7 | |
| Actuated g/C Ratio | | | | 0.68 | 0.19 | |
| Clearance Time (s) | | | | 6.0 | | |
| Vehicle Extension (s) | | | | 3.0 | | |
| Lane Grp Cap (vph) | | | | 2277 | 310 | |
| v/s Ratio Prot | | | | c0.22 | c0.00 | |
| v/s Ratio Perm | | | | | | |
| v/c Ratio | | | | 0.32 | 0.02 | |
| Uniform Delay, d ₁ | | | | 5.9 | 30.0 | |
| Progression Factor | | | | 1.00 | 1.00 | |
| Incremental Delay, d ₂ | | | | 0.4 | 0.0 | |
| Delay (s) | | | | 6.2 | 30.0 | |
| Level of Service | | | | A | C | |
| Approach Delay (s) | 0.0 | | | 6.2 | 30.0 | |
| Approach LOS | A | | | A | C | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 7.4 | HCM Level of Service | A |
| HCM Volume to Capacity ratio | 0.26 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 12.0 |
| Intersection Capacity Utilization | 34.1% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

36: Sundance Dr &

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|-------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↖ | | | ↖ | | | | ↑ | | | | |
| Volume (vph) | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 6.0 | | | 6.0 | | | | 6.0 | | | | |
| Lane Util. Factor | 1.00 | | | 1.00 | | | | 1.00 | | | | |
| Frt | 1.00 | | | 1.00 | | | | 1.00 | | | | |
| Flt Protected | 0.95 | | | 0.95 | | | | 1.00 | | | | |
| Satd. Flow (prot) | 1671 | | | 1671 | | | | 1759 | | | | |
| Flt Permitted | 0.95 | | | 0.95 | | | | 1.00 | | | | |
| Satd. Flow (perm) | 1671 | | | 1671 | | | | 1759 | | | | |
| 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 | 0 | 0 | 1 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 |
| Turn Type | Prot | | | Prot | | | | | | | | |
| Protected Phases | 5 | | | 1 | | | | 8 | | | | |
| Permitted Phases | | | | | | | | | | | | |
| Actuated Green, G (s) | 4.2 | | | 1.2 | | | | 6.5 | | | | |
| Effective Green, g (s) | 4.2 | | | 1.2 | | | | 6.5 | | | | |
| Actuated g/C Ratio | 0.05 | | | 0.01 | | | | 0.07 | | | | |
| Clearance Time (s) | 6.0 | | | 6.0 | | | | 6.0 | | | | |
| Vehicle Extension (s) | 3.0 | | | 3.0 | | | | 3.0 | | | | |
| Lane Grp Cap (vph) | 78 | | | 22 | | | | 127 | | | | |
| v/s Ratio Prot | 0.00 | | | c0.00 | | | | c0.02 | | | | |
| v/s Ratio Perm | | | | | | | | | | | | |
| v/c Ratio | 0.00 | | | 0.05 | | | | 0.28 | | | | |
| Uniform Delay, d1 | 40.9 | | | 43.8 | | | | 39.5 | | | | |
| Progression Factor | 1.00 | | | 1.00 | | | | 0.07 | | | | |
| Incremental Delay, d2 | 0.0 | | | 0.9 | | | | 1.2 | | | | |
| Delay (s) | 40.9 | | | 44.7 | | | | 4.1 | | | | |
| Level of Service | D | | | D | | | | A | | | | |
| Approach Delay (s) | | 40.9 | | | 44.7 | | | 4.1 | | | 0.0 | |
| Approach LOS | | D | | | D | | | A | | | A | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 7.0 | HCM Level of Service | A |
| HCM Volume to Capacity ratio | 0.18 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 79.3 |
| Intersection Capacity Utilization | 17.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

37: US 50 EB #2 & Sundance Dr

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|-------|------|------|------|------|------|-------|------|-------|-------|------|
| Lane Configurations | | ↑↑ | ↑ | | | | | ↑ | | | ↑ | |
| Volume (vph) | 0 | 287 | 8 | 0 | 0 | 0 | 0 | 33 | 2 | 0 | 1 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 6.0 | 6.0 | | | | | 6.0 | | | 6.0 | |
| Lane Util. Factor | | 0.95 | 1.00 | | | | | 1.00 | | | 1.00 | |
| Frt | | 1.00 | 0.85 | | | | | 0.99 | | | 1.00 | |
| Flt Protected | | 1.00 | 1.00 | | | | | 1.00 | | | 1.00 | |
| Satd. Flow (prot) | | 3343 | 1495 | | | | | 1747 | | | 1759 | |
| Flt Permitted | | 1.00 | 1.00 | | | | | 1.00 | | | 1.00 | |
| Satd. Flow (perm) | | 3343 | 1495 | | | | | 1747 | | | 1759 | |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 0 | 319 | 9 | 0 | 0 | 0 | 0 | 37 | 2 | 0 | 1 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 0 | 319 | 6 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 1 | 0 |
| Turn Type | | Perm | | | | | | | | Split | | |
| Protected Phases | | 2 | | | | | | 8 | | 1 | 1 | |
| Permitted Phases | | | 2 | | | | | | | | | |
| Actuated Green, G (s) | | 64.3 | 64.3 | | | | | 6.5 | | | 1.2 | |
| Effective Green, g (s) | | 64.3 | 64.3 | | | | | 6.5 | | | 1.2 | |
| Actuated g/C Ratio | | 0.71 | 0.71 | | | | | 0.07 | | | 0.01 | |
| Clearance Time (s) | | 6.0 | 6.0 | | | | | 6.0 | | | 6.0 | |
| Vehicle Extension (s) | | 3.0 | 3.0 | | | | | 3.0 | | | 3.0 | |
| Lane Grp Cap (vph) | | 2388 | 1068 | | | | | 126 | | | 23 | |
| v/s Ratio Prot | | c0.10 | | | | | | c0.02 | | | c0.00 | |
| v/s Ratio Perm | | | 0.00 | | | | | | | | | |
| v/c Ratio | | 0.13 | 0.01 | | | | | 0.29 | | | 0.04 | |
| Uniform Delay, d1 | | 4.1 | 3.7 | | | | | 39.6 | | | 43.8 | |
| Progression Factor | | 0.82 | 0.74 | | | | | 1.00 | | | 0.10 | |
| Incremental Delay, d2 | | 0.1 | 0.0 | | | | | 1.3 | | | 0.8 | |
| Delay (s) | | 3.4 | 2.7 | | | | | 40.9 | | | 5.4 | |
| Level of Service | | A | A | | | | | D | | | A | |
| Approach Delay (s) | | 3.4 | | | 0.0 | | | 40.9 | | | 5.4 | |
| Approach LOS | | A | | | A | | | D | | | A | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 7.4 | HCM Level of Service | A |
| HCM Volume to Capacity ratio | 0.15 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 18.0 |
| Intersection Capacity Utilization | 25.8% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

46: US 50 WB #6 & 141B

10/28/2008



| Movement | WBT | WBR | NBT | SBL | SBR |
|------------------------|-------|------|-------|-------|--------|
| Lane Configurations | ↑↑ | ↑ | ↑ | ↑ | ↑ |
| Volume (vph) | 451 | 150 | 73 | 157 | 82 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 6.0 | 6.0 | 6.0 | 5.6 | 5.6 |
| Lane Util. Factor | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Satd. Flow (prot) | 3343 | 1495 | 1759 | 1671 | 1495 |
| Flt Permitted | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Satd. Flow (perm) | 3343 | 1495 | 1759 | 1671 | 1495 |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 501 | 167 | 81 | 174 | 91 |
| RTOR Reduction (vph) | 0 | 70 | 0 | 0 | 76 |
| Lane Group Flow (vph) | 501 | 97 | 81 | 174 | 15 |
| Turn Type | | Perm | | Prot | custom |
| Protected Phases | 6 | | 5 | 4 | |
| Permitted Phases | | 6 | 5 | | 4 |
| Actuated Green, G (s) | 60.8 | 60.8 | 9.3 | 17.2 | 17.2 |
| Effective Green, g (s) | 60.8 | 60.8 | 9.3 | 17.2 | 17.2 |
| Actuated g/C Ratio | 0.58 | 0.58 | 0.09 | 0.16 | 0.16 |
| Clearance Time (s) | 6.0 | 6.0 | 6.0 | 5.6 | 5.6 |
| Vehicle Extension (s) | 5.0 | 5.0 | 4.0 | 4.0 | 4.0 |
| Lane Grp Cap (vph) | 1938 | 867 | 156 | 274 | 245 |
| v/s Ratio Prot | c0.15 | | c0.05 | c0.10 | |
| v/s Ratio Perm | | 0.06 | | | 0.01 |
| v/c Ratio | 0.26 | 0.11 | 0.52 | 0.64 | 0.06 |
| Uniform Delay, d1 | 10.9 | 9.9 | 45.7 | 40.9 | 37.0 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.3 | 0.3 | 3.8 | 5.3 | 0.1 |
| Delay (s) | 11.2 | 10.2 | 49.5 | 46.3 | 37.2 |
| Level of Service | B | B | D | D | D |
| Approach Delay (s) | 11.0 | | 49.5 | | |
| Approach LOS | B | | D | | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 22.5 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.36 | | |
| Actuated Cycle Length (s) | 104.9 | Sum of lost time (s) | 17.6 |
| Intersection Capacity Utilization | 40.4% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Unsignalized Intersection Capacity Analysis

1: US 50 #1 & Grand Mesa Ave

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 3 | 1769 | 1 | 23 | 1035 | 0 | 2 | 0 | 0 | 1 | 0 | 41 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 3 | 1923 | 1 | 25 | 1125 | 0 | 2 | 0 | 0 | 1 | 0 | 45 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | 2 |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1125 | | | 1924 | | | 2565 | 3105 | 962 | 2143 | 3105 | 562 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1125 | | | 1924 | | | 2565 | 3105 | 962 | 2143 | 3105 | 562 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 91 | | | 78 | 100 | 100 | 95 | 100 | 90 |
| cM capacity (veh/h) | 583 | | | 280 | | | 10 | 9 | 245 | 24 | 9 | 455 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|-------|------|
| Volume Total | 3 | 1282 | 642 | 25 | 750 | 375 | 2 | 46 |
| Volume Left | 3 | 0 | 0 | 25 | 0 | 0 | 2 | 1 |
| Volume Right | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 45 |
| cSH | 583 | 1700 | 1700 | 280 | 1700 | 1700 | 10 | 466 |
| Volume to Capacity | 0.01 | 0.75 | 0.38 | 0.09 | 0.44 | 0.22 | 0.22 | 0.10 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 7 | 0 | 0 | 13 | 8 |
| Control Delay (s) | 11.2 | 0.0 | 0.0 | 19.1 | 0.0 | 0.0 | 449.7 | 17.4 |
| Lane LOS | B | | | C | | | F | C |
| Approach Delay (s) | 0.0 | | | 0.4 | | | 449.7 | 17.4 |
| Approach LOS | | | | | | | F | C |

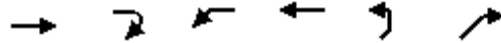
Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.7 |
| Intersection Capacity Utilization | 58.9% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

2: US 50 #1 & Gunnison Blvd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NEL | NER |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | ↘ | |
| Volume (veh/h) | 1771 | 7 | 0 | 1029 | 0 | 2 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 1884 | 7 | 0 | 1095 | 0 | 2 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | 1069 | | |
| pX, platoon unblocked | | | | | 0.86 | |
| vC, conflicting volume | | | 1891 | | 2435 | 946 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 1891 | | 2340 | 946 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 99 |
| cM capacity (veh/h) | | | 289 | | 24 | 251 |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NE 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 1256 | 635 | 547 | 547 | 2 |
| Volume Left | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 7 | 0 | 0 | 2 |
| cSH | 1700 | 1700 | 1700 | 1700 | 251 |
| Volume to Capacity | 0.74 | 0.37 | 0.32 | 0.32 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 19.4 |
| Lane LOS | | | | | C |
| Approach Delay (s) | 0.0 | | 0.0 | | 19.4 |
| Approach LOS | | | | | C |

| Intersection Summary | | | | | |
|-----------------------------------|--|--|-------|----------------------|---|
| Average Delay | | | 0.0 | | |
| Intersection Capacity Utilization | | | 59.2% | ICU Level of Service | B |
| Analysis Period (min) | | | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

3: US 50 #1 & Santa Clara Ave

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 41 | 1733 | 0 | 1 | 1001 | 8 | 0 | 0 | 0 | 1 | 0 | 24 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 44 | 1844 | 0 | 1 | 1065 | 9 | 0 | 0 | 0 | 1 | 0 | 26 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | 634 | | | | | | | |
| pX, platoon unblocked | 0.85 | | | | | | 0.85 | 0.85 | | 0.85 | 0.85 | 0.85 |
| vC, conflicting volume | 1073 | | | 1844 | | | 2491 | 3006 | 922 | 2080 | 3002 | 537 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 720 | | | 1844 | | | 2398 | 3008 | 922 | 1912 | 3003 | 85 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 94 | | | 100 | | | 100 | 100 | 100 | 97 | 100 | 97 |
| cM capacity (veh/h) | 709 | | | 302 | | | 12 | 9 | 261 | 31 | 9 | 793 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 44 | 1229 | 615 | 1 | 710 | 363 | 0 | 27 |
| Volume Left | 44 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 26 |
| cSH | 709 | 1700 | 1700 | 302 | 1700 | 1700 | 1700 | 399 |
| Volume to Capacity | 0.06 | 0.72 | 0.36 | 0.00 | 0.42 | 0.21 | 0.00 | 0.07 |
| Queue Length 95th (ft) | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Control Delay (s) | 10.4 | 0.0 | 0.0 | 17.0 | 0.0 | 0.0 | 0.0 | 14.7 |
| Lane LOS | B | | | C | | | A | B |
| Approach Delay (s) | 0.2 | | | 0.0 | | | 0.0 | 14.7 |
| Approach LOS | | | | | | | A | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.3 |
| Intersection Capacity Utilization | 57.9% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

5: US 50 #1 & James St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↕ | | ↖ | ↕ | | | ↕ | | | ↕ | |
| Volume (veh/h) | 0 | 1502 | 0 | 0 | 794 | 1 | 0 | 0 | 0 | 1 | 0 | 4 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Hourly flow rate (vph) | 0 | 1548 | 0 | 0 | 819 | 1 | 0 | 0 | 0 | 1 | 0 | 4 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | 513 | | | | | | | | | | |
| pX, platoon unblocked | | | | 0.77 | | | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | |
| vC, conflicting volume | 820 | | | 1548 | | | 1962 | 2368 | 774 | 1593 | 2368 | 410 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 820 | | | 1113 | | | 1650 | 2178 | 106 | 1171 | 2178 | 410 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 99 | 100 | 99 |
| cM capacity (veh/h) | 767 | | | 454 | | | 47 | 33 | 699 | 108 | 33 | 574 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 0 | 1032 | 516 | 0 | 546 | 274 | 0 | 5 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 309 |
| Volume to Capacity | 0.00 | 0.61 | 0.30 | 0.00 | 0.32 | 0.16 | 0.00 | 0.02 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 16.9 |
| Lane LOS | | | | | | | A | C |
| Approach Delay (s) | 0.0 | | | 0.0 | | | 0.0 | 16.9 |
| Approach LOS | | | | | | | A | C |

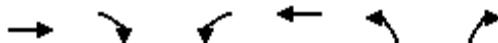
Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.0 |
| Intersection Capacity Utilization | 51.5% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

6: US 50 #1 & Green Acre 1

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↗ |
| Volume (veh/h) | 1507 | 10 | 0 | 793 | 0 | 1 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Hourly flow rate (vph) | 1570 | 10 | 0 | 826 | 0 | 1 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 1023 | | | | | |
| pX, platoon unblocked | | | 0.76 | 0.76 | 0.76 | 0.76 |
| vC, conflicting volume | | | 1580 | 1988 | 790 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 1140 | 1674 | 105 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 100 | 100 | 100 | |
| cM capacity (veh/h) | | | 439 | 62 | 695 | |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NB 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 1047 | 534 | 413 | 413 | 1 |
| Volume Left | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 10 | 0 | 0 | 1 |
| cSH | 1700 | 1700 | 1700 | 1700 | 695 |
| Volume to Capacity | 0.62 | 0.31 | 0.24 | 0.24 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 10.2 |
| Lane LOS | | | | | B |
| Approach Delay (s) | 0.0 | | 0.0 | | 10.2 |
| Approach LOS | | | | | B |

| Intersection Summary | | | | | |
|-----------------------------------|--|--|-------|----------------------|---|
| Average Delay | | | 0.0 | | |
| Intersection Capacity Utilization | | | 52.0% | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

7: US 50 #1 & Elm Park

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | ↙ | ↑↑ | ↘ | |
| Volume (veh/h) | 1508 | 10 | 13 | 794 | 5 | 16 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly flow rate (vph) | 1587 | 11 | 14 | 836 | 5 | 17 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 1190 | | | | | |
| pX, platoon unblocked | | | 0.77 | 0.77 | 0.77 | 0.77 |
| vC, conflicting volume | | | 1598 | 2038 | 799 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 1168 | 1743 | 124 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 97 | 90 | 98 | |
| cM capacity (veh/h) | | | 429 | 54 | 677 | |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 1058 | 540 | 14 | 418 | 418 | 22 |
| Volume Left | 0 | 0 | 14 | 0 | 0 | 5 |
| Volume Right | 0 | 11 | 0 | 0 | 0 | 17 |
| cSH | 1700 | 1700 | 429 | 1700 | 1700 | 181 |
| Volume to Capacity | 0.62 | 0.32 | 0.03 | 0.25 | 0.25 | 0.12 |
| Queue Length 95th (ft) | 0 | 0 | 2 | 0 | 0 | 10 |
| Control Delay (s) | 0.0 | 0.0 | 13.7 | 0.0 | 0.0 | 27.7 |
| Lane LOS | | | B | | | D |
| Approach Delay (s) | 0.0 | | 0.2 | | | 27.7 |
| Approach LOS | | | | | | D |

| Intersection Summary | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|---|
| Average Delay | | | 0.3 | | | |
| Intersection Capacity Utilization | | | 52.0% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

8: US 50 #1 & Green Acre 2

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|-----------------------------------|------|------|-------|----------------------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↗ |
| Volume (veh/h) | 1501 | 15 | 0 | 794 | 0 | 7 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Hourly flow rate (vph) | 1547 | 15 | 0 | 819 | 0 | 7 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 1563 | 1964 | 781 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 1563 | 1964 | 781 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 100 | 100 | 98 | |
| cM capacity (veh/h) | | | 391 | 51 | 325 | |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NB 1 | |
| Volume Total | 1032 | 531 | 409 | 409 | 7 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 15 | 0 | 0 | 7 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 325 | |
| Volume to Capacity | 0.61 | 0.31 | 0.24 | 0.24 | 0.02 | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 2 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 16.3 | |
| Lane LOS | | | | | | C |
| Approach Delay (s) | 0.0 | | 0.0 | | 16.3 | |
| Approach LOS | | | | | | C |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 52.0% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

9: US 50 #1 & Aspen St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↗ | ↑↗ | | ↖ | ↑↖ | | | ↕ | | | ↕ | |
| Volume (veh/h) | 9 | 1498 | 6 | 8 | 805 | 0 | 6 | 2 | 3 | 3 | 0 | 2 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Hourly flow rate (vph) | 9 | 1544 | 6 | 8 | 830 | 0 | 6 | 2 | 3 | 3 | 0 | 2 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 830 | | | 1551 | | | 1999 | 2412 | 775 | 1641 | 2415 | 415 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 830 | | | 1551 | | | 1999 | 2412 | 775 | 1641 | 2415 | 415 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 98 | | | 81 | 93 | 99 | 95 | 100 | 100 |
| cM capacity (veh/h) | 760 | | | 396 | | | 32 | 29 | 328 | 57 | 29 | 570 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|-------|------|
| Volume Total | 9 | 1030 | 521 | 8 | 553 | 277 | 11 | 5 |
| Volume Left | 9 | 0 | 0 | 8 | 0 | 0 | 6 | 3 |
| Volume Right | 0 | 0 | 6 | 0 | 0 | 0 | 3 | 2 |
| cSH | 760 | 1700 | 1700 | 396 | 1700 | 1700 | 41 | 89 |
| Volume to Capacity | 0.01 | 0.61 | 0.31 | 0.02 | 0.33 | 0.16 | 0.27 | 0.06 |
| Queue Length 95th (ft) | 1 | 0 | 0 | 2 | 0 | 0 | 23 | 5 |
| Control Delay (s) | 9.8 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 | 122.4 | 48.1 |
| Lane LOS | A | | | B | | | F | E |
| Approach Delay (s) | 0.1 | | | 0.1 | | | 122.4 | 48.1 |
| Approach LOS | | | | | | | F | E |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.8 |
| Intersection Capacity Utilization | 51.6% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

10: US 50 #1 & Palmer St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↗ | ↑↑ | | | ↑↑ | | | ↕ | | | ↕ | |
| Volume (veh/h) | 6 | 1475 | 0 | 0 | 787 | 4 | 2 | 0 | 3 | 3 | 0 | 9 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 7 | 1603 | 0 | 0 | 855 | 4 | 2 | 0 | 3 | 3 | 0 | 10 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 860 | | | 1603 | | | 2054 | 2476 | 802 | 1676 | 2474 | 430 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 860 | | | 1603 | | | 2054 | 2476 | 802 | 1676 | 2474 | 430 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 99 | | | 100 | | | 93 | 100 | 99 | 94 | 100 | 98 |
| cM capacity (veh/h) | 740 | | | 377 | | | 29 | 27 | 315 | 57 | 27 | 557 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 7 | 1069 | 534 | 570 | 289 | 5 | 13 |
| Volume Left | 7 | 0 | 0 | 0 | 0 | 2 | 3 |
| Volume Right | 0 | 0 | 0 | 0 | 4 | 3 | 10 |
| cSH | 740 | 1700 | 1700 | 1700 | 1700 | 64 | 176 |
| Volume to Capacity | 0.01 | 0.63 | 0.31 | 0.34 | 0.17 | 0.08 | 0.07 |
| Queue Length 95th (ft) | 1 | 0 | 0 | 0 | 0 | 7 | 6 |
| Control Delay (s) | 9.9 | 0.0 | 0.0 | 0.0 | 0.0 | 66.5 | 27.2 |
| Lane LOS | A | | | | | F | D |
| Approach Delay (s) | 0.0 | | | 0.0 | | 66.5 | 27.2 |
| Approach LOS | | | | | | F | D |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.3 |
| Intersection Capacity Utilization | 50.8% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

11: US 50 #1 & Palisade St

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Volume (veh/h) | 15 | 1475 | 770 | 7 | 2 | 3 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 16 | 1569 | 819 | 7 | 2 | 3 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 827 | | | | 1639 | 413 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 827 | | | | 1639 | 413 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 98 | | | | 97 | 99 |
| cM capacity (veh/h) | 763 | | | | 84 | 571 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 16 | 785 | 785 | 546 | 280 | 5 |
| Volume Left | 16 | 0 | 0 | 0 | 0 | 2 |
| Volume Right | 0 | 0 | 0 | 0 | 7 | 3 |
| cSH | 763 | 1700 | 1700 | 1700 | 1700 | 172 |
| Volume to Capacity | 0.02 | 0.46 | 0.46 | 0.32 | 0.16 | 0.03 |
| Queue Length 95th (ft) | 2 | 0 | 0 | 0 | 0 | 2 |
| Control Delay (s) | 9.8 | 0.0 | 0.0 | 0.0 | 0.0 | 26.6 |
| Lane LOS | A | | | | | D |
| Approach Delay (s) | 0.1 | | | 0.0 | | 26.6 |
| Approach LOS | | | | | | D |

| Intersection Summary | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|---|
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 50.8% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Intersection has too many legs for HCM analysis.

HCM Unsignalized Intersection Capacity Analysis
 14: US 50 #1 & Dorothy Ave

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 18 | 1138 | 265 | 29 | 700 | 3 | 30 | 1 | 6 | 9 | 1 | 18 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 19 | 1211 | 282 | 31 | 745 | 3 | 32 | 1 | 6 | 10 | 1 | 19 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | 807 | | | | | | | | | | |
| pX, platoon unblocked | | | | 0.77 | | | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | |
| vC, conflicting volume | 748 | | | 1211 | | | 1703 | 2059 | 605 | 1459 | 2057 | 374 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 748 | | | 681 | | | 1319 | 1780 | 0 | 1002 | 1778 | 374 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 98 | | | 95 | | | 58 | 98 | 99 | 93 | 98 | 97 |
| cM capacity (veh/h) | 818 | | | 670 | | | 76 | 55 | 822 | 135 | 55 | 607 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|
| Volume Total | 19 | 605 | 605 | 282 | 31 | 496 | 251 | 39 | 30 |
| Volume Left | 19 | 0 | 0 | 0 | 31 | 0 | 0 | 32 | 10 |
| Volume Right | 0 | 0 | 0 | 282 | 0 | 0 | 3 | 6 | 19 |
| cSH | 818 | 1700 | 1700 | 1700 | 670 | 1700 | 1700 | 88 | 244 |
| Volume to Capacity | 0.02 | 0.36 | 0.36 | 0.17 | 0.05 | 0.29 | 0.15 | 0.45 | 0.12 |
| Queue Length 95th (ft) | 2 | 0 | 0 | 0 | 4 | 0 | 0 | 46 | 10 |
| Control Delay (s) | 9.5 | 0.0 | 0.0 | 0.0 | 10.6 | 0.0 | 0.0 | 75.2 | 21.8 |
| Lane LOS | A | | | | B | | | F | C |
| Approach Delay (s) | 0.1 | | | | 0.4 | | | 75.2 | 21.8 |
| Approach LOS | | | | | | | | F | C |













Intersection Summary

| | | | | | | | | | |
|-----------------------------------|--|-------|--|----------------------|--|--|--|---|--|
| Average Delay | | 1.7 | | | | | | | |
| Intersection Capacity Utilization | | 42.7% | | ICU Level of Service | | | | A | |
| Analysis Period (min) | | 15 | | | | | | | |

Intersection Sign configuration not allowed in HCM analysis.

HCM Unsignalized Intersection Capacity Analysis
 16: US 50 #1 & WB On-Ramp

10/28/2008

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↑↑ | | | ↑↑ | | | | ↗ | | | ↗ |
| Volume (veh/h) | 0 | 807 | 0 | 0 | 538 | 0 | 0 | 0 | 6 | 0 | 0 | 180 |
| Sign Control | | Free | | | Free | | | Yield | | | Yield | |
| Grade | | 0% | | | 0% | | | 0% | | | 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 |
| Hourly flow rate (vph) | 0 | 877 | 0 | 0 | 585 | 0 | 0 | 0 | 7 | 0 | 0 | 196 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 585 | | | 877 | | | 1365 | 1462 | 439 | 1030 | 1462 | 292 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 585 | | | 877 | | | 1365 | 1462 | 439 | 1030 | 1462 | 292 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 99 | 100 | 100 | 71 |
| cM capacity (veh/h) | 946 | | | 729 | | | 72 | 121 | 550 | 177 | 121 | 686 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | NB 1 | SB 1 | | | | | | |
| Volume Total | 439 | 439 | 292 | 292 | 7 | 196 | | | | | | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| Volume Right | 0 | 0 | 0 | 0 | 7 | 196 | | | | | | |
| cSH | 1700 | 1700 | 1700 | 1700 | 550 | 686 | | | | | | |
| Volume to Capacity | 0.26 | 0.26 | 0.17 | 0.17 | 0.01 | 0.29 | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 1 | 29 | | | | | | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 11.6 | 12.3 | | | | | | |
| Lane LOS | | | | | B | B | | | | | | |
| Approach Delay (s) | 0.0 | | 0.0 | | 11.6 | 12.3 | | | | | | |
| Approach LOS | | | | | B | B | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 1.5 | | | | | | | | | |
| Intersection Capacity Utilization | | | 32.7% | | ICU Level of Service | | A | | | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

17: US 50 #1 & Frontage Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | ↘ | ↖ | ↗ | ↘ | | ↕ | | | ↕ | |
| Volume (veh/h) | 124 | 726 | 1 | 10 | 475 | 4 | 6 | 4 | 9 | 1 | 5 | 57 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Hourly flow rate (vph) | 129 | 756 | 1 | 10 | 495 | 4 | 6 | 4 | 9 | 1 | 5 | 59 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 499 | | | 757 | | | 1345 | 1534 | 378 | 1164 | 1531 | 247 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 499 | | | 757 | | | 1345 | 1534 | 378 | 1164 | 1531 | 247 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 87 | | | 99 | | | 92 | 96 | 98 | 99 | 94 | 92 |
| cM capacity (veh/h) | 1020 | | | 811 | | | 82 | 94 | 603 | 121 | 94 | 735 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 129 | 378 | 378 | 1 | 10 | 247 | 247 | 4 | 20 | 66 |
| Volume Left | 129 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 6 | 1 |
| Volume Right | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 9 | 59 |
| cSH | 1020 | 1700 | 1700 | 1700 | 811 | 1700 | 1700 | 1700 | 146 | 454 |
| Volume to Capacity | 0.13 | 0.22 | 0.22 | 0.00 | 0.01 | 0.15 | 0.15 | 0.00 | 0.14 | 0.14 |
| Queue Length 95th (ft) | 11 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 11 | 13 |
| Control Delay (s) | 9.0 | 0.0 | 0.0 | 0.0 | 9.5 | 0.0 | 0.0 | 0.0 | 33.6 | 14.3 |
| Lane LOS | A | | | | A | | | | D | B |
| Approach Delay (s) | 1.3 | | | | 0.2 | | | | 33.6 | 14.3 |
| Approach LOS | | | | | | | | | D | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 1.9 |
| Intersection Capacity Utilization | 38.3% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

18: US 50 WB #3 & 27 3/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | ↙ | ↕ | ↗ | | ↖ | | | ↘ | ↗ |
| Volume (veh/h) | 0 | 0 | 0 | 0 | 434 | 49 | 1 | 84 | 0 | 0 | 119 | 32 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 0 | 457 | 52 | 1 | 88 | 0 | 0 | 125 | 34 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 508 | | | 0 | | | 325 | 508 | 0 | 501 | 457 | 228 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 508 | | | 0 | | | 325 | 508 | 0 | 501 | 457 | 228 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 80 | 100 | 100 | 74 | 96 |
| cM capacity (veh/h) | 1012 | | | 1579 | | | 451 | 453 | 1065 | 374 | 485 | 756 |

| Direction, Lane # | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 0 | 228 | 228 | 52 | 89 | 159 |
| Volume Left | 0 | 0 | 0 | 0 | 1 | 0 |
| Volume Right | 0 | 0 | 0 | 52 | 0 | 34 |
| cSH | 1700 | 1700 | 1700 | 1700 | 453 | 525 |
| Volume to Capacity | 0.00 | 0.13 | 0.13 | 0.03 | 0.20 | 0.30 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 18 | 32 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 14.9 | 14.8 |
| Lane LOS | | | | | B | B |
| Approach Delay (s) | 0.0 | | | | 14.9 | 14.8 |
| Approach LOS | | | | | B | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 4.9 |
| Intersection Capacity Utilization | 26.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

19: US 50 EB #2 & 27 3/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 83 | 678 | 2 | 0 | 0 | 0 | 0 | 2 | 10 | 113 | 6 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly flow rate (vph) | 87 | 714 | 2 | 0 | 0 | 0 | 0 | 2 | 11 | 119 | 6 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 716 | | | 892 | 888 | 357 | 533 | 891 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 716 | | | 892 | 888 | 357 | 533 | 891 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 94 | | | 100 | | | 100 | 99 | 98 | 70 | 98 | 100 |
| cM capacity (veh/h) | 1579 | | | 842 | | | 214 | 256 | 623 | 390 | 255 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 87 | 357 | 357 | 2 | 13 | 125 |
| Volume Left | 87 | 0 | 0 | 0 | 0 | 119 |
| Volume Right | 0 | 0 | 0 | 2 | 11 | 0 |
| cSH | 1579 | 1700 | 1700 | 1700 | 502 | 380 |
| Volume to Capacity | 0.06 | 0.21 | 0.21 | 0.00 | 0.03 | 0.33 |
| Queue Length 95th (ft) | 4 | 0 | 0 | 0 | 2 | 35 |
| Control Delay (s) | 7.4 | 0.0 | 0.0 | 0.0 | 12.4 | 19.1 |
| Lane LOS | A | | | | B | C |
| Approach Delay (s) | 0.8 | | | | 12.4 | 19.1 |
| Approach LOS | | | | | B | C |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 3.4 |
| Intersection Capacity Utilization | 38.7% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis
 20: US 50 WB #3 & Fairgrounds

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Volume (veh/h) | 0 | 0 | 18 | 479 | 6 | 0 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 0 | 0 | 19 | 515 | 6 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 0 | | 296 | 0 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 0 | | 296 | 0 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 99 | | 99 | 100 |
| cM capacity (veh/h) | | | 1579 | | 647 | 1065 |

| Direction, Lane # | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|
| Volume Total | 19 | 258 | 258 | 6 |
| Volume Left | 19 | 0 | 0 | 6 |
| Volume Right | 0 | 0 | 0 | 0 |
| cSH | 1579 | 1700 | 1700 | 647 |
| Volume to Capacity | 0.01 | 0.15 | 0.15 | 0.01 |
| Queue Length 95th (ft) | 1 | 0 | 0 | 1 |
| Control Delay (s) | 7.3 | 0.0 | 0.0 | 10.6 |
| Lane LOS | A | | | B |
| Approach Delay (s) | 0.3 | | | 10.6 |
| Approach LOS | | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.4 | |
| Intersection Capacity Utilization | | 47.6% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

21: US 50 EB #2 & Fairgrounds

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↑↑ | ↗ | | | | | ↑↗ | | | ↖ | |
| Volume (veh/h) | 0 | 759 | 10 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 18 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 0 | 816 | 11 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 19 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 827 | | | 826 | 816 | 408 | 411 | 827 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 827 | | | 826 | 816 | 408 | 411 | 827 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 98 | 100 | 100 | 93 | 100 |
| cM capacity (veh/h) | 1579 | | | 762 | | | 242 | 299 | 576 | 502 | 294 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 408 | 408 | 11 | 6 | 19 |
| Volume Left | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 11 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 299 | 294 |
| Volume to Capacity | 0.24 | 0.24 | 0.01 | 0.02 | 0.07 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 2 | 5 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 17.3 | 18.1 |
| Lane LOS | | | | C | C |
| Approach Delay (s) | 0.0 | | | 17.3 | 18.1 |
| Approach LOS | | | | C | C |

Intersection Summary

| | | | | | |
|-----------------------------------|--|-------|--|----------------------|---|
| Average Delay | | 0.5 | | | |
| Intersection Capacity Utilization | | 42.9% | | ICU Level of Service | A |
| Analysis Period (min) | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis
 22: US 50 EB #2 & KOA

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | | | ↗ |
| Volume (veh/h) | 754 | 15 | 0 | 0 | 0 | 13 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 820 | 16 | 0 | 0 | 0 | 14 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 836 | | 828 | 418 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 836 | | 828 | 418 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 98 |
| cM capacity (veh/h) | | | 756 | | 298 | 567 |

| Direction, Lane # | EB 1 | EB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 546 | 289 | 14 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 16 | 14 |
| cSH | 1700 | 1700 | 567 |
| Volume to Capacity | 0.32 | 0.17 | 0.02 |
| Queue Length 95th (ft) | 0 | 0 | 2 |
| Control Delay (s) | 0.0 | 0.0 | 11.5 |
| Lane LOS | | | B |
| Approach Delay (s) | 0.0 | | 11.5 |
| Approach LOS | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.2 | |
| Intersection Capacity Utilization | | 31.3% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

23: US 50 WB #3 & 28 1/2 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | ↙ | ↕ | ↗ | | ↖ | | | ↘ | ↗ |
| Volume (veh/h) | 0 | 0 | 0 | 34 | 461 | 4 | 32 | 116 | 0 | 0 | 14 | 13 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 36 | 490 | 4 | 34 | 123 | 0 | 0 | 15 | 14 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 495 | | | 0 | | | 339 | 567 | 0 | 624 | 563 | 245 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 495 | | | 0 | | | 339 | 567 | 0 | 624 | 563 | 245 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 98 | | | 94 | 70 | 100 | 100 | 96 | 98 |
| cM capacity (veh/h) | 1024 | | | 1579 | | | 540 | 409 | 1065 | 270 | 412 | 737 |

| Direction, Lane # | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 36 | 245 | 245 | 4 | 157 | 29 |
| Volume Left | 36 | 0 | 0 | 0 | 34 | 0 |
| Volume Right | 0 | 0 | 0 | 4 | 0 | 14 |
| cSH | 1579 | 1700 | 1700 | 1700 | 432 | 523 |
| Volume to Capacity | 0.02 | 0.14 | 0.14 | 0.00 | 0.36 | 0.05 |
| Queue Length 95th (ft) | 2 | 0 | 0 | 0 | 41 | 4 |
| Control Delay (s) | 7.3 | 0.0 | 0.0 | 0.0 | 18.0 | 12.3 |
| Lane LOS | A | | | | C | B |
| Approach Delay (s) | 0.5 | | | | 18.0 | 12.3 |
| Approach LOS | | | | | C | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 4.8 |
| Intersection Capacity Utilization | 34.0% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

24: US 50 EB #2 & 28 1/2 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 96 | 654 | 18 | 0 | 0 | 0 | 0 | 52 | 4 | 5 | 43 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 102 | 696 | 19 | 0 | 0 | 0 | 0 | 55 | 4 | 5 | 46 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 715 | | | 923 | 900 | 348 | 584 | 919 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 715 | | | 923 | 900 | 348 | 584 | 919 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 94 | | | 100 | | | 100 | 78 | 99 | 98 | 81 | 100 |
| cM capacity (veh/h) | 1579 | | | 843 | | | 176 | 249 | 631 | 300 | 243 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 102 | 348 | 348 | 19 | 60 | 51 |
| Volume Left | 102 | 0 | 0 | 0 | 0 | 5 |
| Volume Right | 0 | 0 | 0 | 19 | 4 | 0 |
| cSH | 1579 | 1700 | 1700 | 1700 | 260 | 248 |
| Volume to Capacity | 0.06 | 0.20 | 0.20 | 0.01 | 0.23 | 0.21 |
| Queue Length 95th (ft) | 5 | 0 | 0 | 0 | 22 | 19 |
| Control Delay (s) | 7.4 | 0.0 | 0.0 | 0.0 | 22.9 | 23.3 |
| Lane LOS | A | | | | C | C |
| Approach Delay (s) | 0.9 | | | | 22.9 | 23.3 |
| Approach LOS | | | | | C | C |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 3.6 |
| Intersection Capacity Utilization | 31.2% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis
 25: US 50 EB #2 & Rainbow Dr

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | ↑ | | | | ↑ |
| Volume (veh/h) | 667 | 19 | 0 | 0 | 0 | 3 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Hourly flow rate (vph) | 733 | 21 | 0 | 0 | 0 | 3 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 754 | | 733 | 366 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 754 | | 733 | 366 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 99 |
| cM capacity (veh/h) | | | 814 | | 343 | 614 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | NB 1 |
|------------------------|------|------|------|------|
| Volume Total | 366 | 366 | 21 | 3 |
| Volume Left | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 21 | 3 |
| cSH | 1700 | 1700 | 1700 | 614 |
| Volume to Capacity | 0.22 | 0.22 | 0.01 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 10.9 |
| Lane LOS | | | | B |
| Approach Delay (s) | 0.0 | | | 10.9 |
| Approach LOS | | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 28.4% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis
 26: US 50 WB #3 & Tennessee St

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 493 | 0 | 0 | 2 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 0 | 536 | 0 | 0 | 2 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 536 | | | | 536 | 268 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 536 | | | | 536 | 268 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 988 | | | | 460 | 712 |

| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 357 | 179 | 2 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 2 |
| cSH | 1700 | 1700 | 712 |
| Volume to Capacity | 0.21 | 0.11 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 10.1 |
| Lane LOS | | | B |
| Approach Delay (s) | 0.0 | | 10.1 |
| Approach LOS | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 23.6% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

27: US 50 WB #3 & Indiana St

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 520 | 3 | 0 | 1 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Hourly flow rate (vph) | 0 | 0 | 542 | 3 | 0 | 1 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 545 | | | | 543 | 272 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 545 | | | | 543 | 272 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 980 | | | | 455 | 708 |

| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 361 | 184 | 1 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 3 | 1 |
| cSH | 1700 | 1700 | 708 |
| Volume to Capacity | 0.21 | 0.11 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 10.1 |
| Lane LOS | | | B |
| Approach Delay (s) | 0.0 | | 10.1 |
| Approach LOS | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 24.5% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis
 28: US 50 WB #3 & Dee Vee Dr

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|-------|------|
| Lane Configurations | | | | ↕↕ | ↕ | |
| Volume (veh/h) | 0 | 0 | 0 | 532 | 3 | 0 |
| Sign Control | Free | | | Free | Yield | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 572 | 3 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 0 | 286 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 0 | 286 | 0 | |
| tC, single (s) | | | 4.3 | 7.0 | 7.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | 3.6 | 3.4 | |
| p0 queue free % | | | 100 | 100 | 100 | |
| cM capacity (veh/h) | | | 1579 | 665 | 1065 | |

| Direction, Lane # | WB 1 | WB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 191 | 381 | 3 |
| Volume Left | 0 | 0 | 3 |
| Volume Right | 0 | 0 | 0 |
| cSH | 1579 | 1700 | 665 |
| Volume to Capacity | 0.00 | 0.22 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 10.4 |
| Lane LOS | B | | |
| Approach Delay (s) | 0.0 | | 10.4 |
| Approach LOS | B | | |

| Intersection Summary | | | |
|-----------------------------------|-------|----------------------|---|
| Average Delay | | 0.1 | |
| Intersection Capacity Utilization | 29.1% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

29: US 50 EB #2 & Dee Vee Dr

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Lane Configurations | | ↔↔ | | | | | | ↔ | | | ↔ | |
| Volume (veh/h) | 3 | 687 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Yield | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 3 | 739 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 739 | | | 746 | 745 | 369 | 377 | 745 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 739 | | | 746 | 745 | 369 | 377 | 745 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 99 | 100 |
| cM capacity (veh/h) | 1579 | | | 825 | | | 289 | 329 | 611 | 539 | 329 | 1065 |

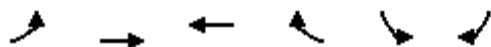
| Direction, Lane # | EB 1 | EB 2 | NB 1 | SB 1 |
|------------------------|------|------|------|------|
| Volume Total | 373 | 369 | 1 | 2 |
| Volume Left | 3 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 1 | 0 |
| cSH | 1579 | 1700 | 611 | 329 |
| Volume to Capacity | 0.00 | 0.22 | 0.00 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.1 | 0.0 | 10.9 | 16.0 |
| Lane LOS | A | | B | C |
| Approach Delay (s) | 0.0 | | 10.9 | 16.0 |
| Approach LOS | | | B | C |

| Intersection Summary | | | |
|-----------------------------------|--|-------|----------------------|
| Average Delay | | 0.1 | |
| Intersection Capacity Utilization | | 29.1% | ICU Level of Service |
| Analysis Period (min) | | 15 | A |

HCM Unsignalized Intersection Capacity Analysis

30: US 50 WB #3 & Elm Dr

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 531 | 1 | 0 | 1 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 0 | 0 | 565 | 1 | 0 | 1 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 566 | | | | 565 | 283 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 566 | | | | 565 | 283 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 962 | | | | 441 | 696 |

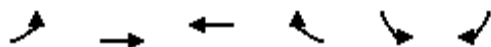
| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 377 | 189 | 1 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 1 | 1 |
| cSH | 1700 | 1700 | 696 |
| Volume to Capacity | 0.22 | 0.11 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 10.2 |
| Lane LOS | | | B |
| Approach Delay (s) | 0.0 | | 10.2 |
| Approach LOS | | | B |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 24.7% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

31: US 50 WB #3 & Reta Dr

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | | | ↑↑ | | | ↗ |
| Volume (veh/h) | 0 | 0 | 498 | 0 | 0 | 0 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly flow rate (vph) | 0 | 0 | 524 | 0 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | 389 | | | |
| pX, platoon unblocked | 0.94 | | | | 0.94 | 0.94 |
| vC, conflicting volume | 524 | | | | 524 | 262 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 360 | | | | 360 | 80 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 1082 | | | | 560 | 886 |

| Direction, Lane # | WB 1 | WB 2 | SB 1 |
|------------------------|------|------|------|
| Volume Total | 349 | 175 | 0 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.21 | 0.10 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | A |
| Approach Delay (s) | 0.0 | | 0.0 |
| Approach LOS | | | A |

| Intersection Summary | | | |
|-----------------------------------|--|-------|------------------------|
| Average Delay | | 0.0 | |
| Intersection Capacity Utilization | | 17.1% | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

32: US 50 EB #2 &

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBR | NBR2 | SWL | SWR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | |
| Volume (veh/h) | 119 | 581 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Sign Control | | Free | | | Free | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | 0% | | | 0% | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly flow rate (vph) | 125 | 612 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Pedestrians | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | |
| Median storage (veh) | | | | | | | | | | | |
| Upstream signal (ft) | | | | | 424 | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 618 | | | 862 | 862 | 306 | 868 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 618 | | | 862 | 862 | 306 | 868 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 4.1 | 3.4 |
| p0 queue free % | 92 | | | 100 | | | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1579 | | | 918 | | | 225 | 258 | 673 | 256 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | NB 1 |
|------------------------|------|------|------|------|------|
| Volume Total | 125 | 306 | 306 | 6 | 1 |
| Volume Left | 125 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 6 | 1 |
| cSH | 1579 | 1700 | 1700 | 1700 | 673 |
| Volume to Capacity | 0.08 | 0.18 | 0.18 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 6 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 7.5 | 0.0 | 0.0 | 0.0 | 10.4 |
| Lane LOS | A | | | | B |
| Approach Delay (s) | 1.3 | | | | 10.4 |
| Approach LOS | | | | | B |

| Intersection Summary | | | | |
|-----------------------------------|--|-------|-----|----------------------|
| Average Delay | | | 1.3 | |
| Intersection Capacity Utilization | | 26.1% | | ICU Level of Service |
| Analysis Period (min) | | 15 | | A |

HCM Unsignalized Intersection Capacity Analysis
 38: US 50 EB #2 & Redrock Rd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | | | ↗ |
| Volume (veh/h) | 651 | 4 | 0 | 0 | 0 | 4 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Hourly flow rate (vph) | 757 | 5 | 0 | 0 | 0 | 5 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 595 | | | | | |
| pX, platoon unblocked | | | 0.95 | | 0.95 | 0.95 |
| vC, conflicting volume | | | 762 | | 759 | 381 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 650 | | 647 | 250 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 100 | 99 |
| cM capacity (veh/h) | | | 850 | | 372 | 697 |

| Direction, Lane # | EB 1 | EB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 505 | 257 | 5 |
| Volume Left | 0 | 0 | 0 |
| Volume Right | 0 | 5 | 5 |
| cSH | 1700 | 1700 | 697 |
| Volume to Capacity | 0.30 | 0.15 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 10.2 |
| Lane LOS | | | B |
| Approach Delay (s) | 0.0 | | 10.2 |
| Approach LOS | | | B |

| Intersection Summary | | | |
|-----------------------------------|-------|-----|------------------------|
| Average Delay | | 0.1 | |
| Intersection Capacity Utilization | 28.1% | | ICU Level of Service A |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

39: US 50 WB #3 & 29 1/4 Rd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|-------|------|
| Lane Configurations | | | | ↕↕ | ↕ | |
| Volume (veh/h) | 0 | 0 | 0 | 463 | 27 | 0 |
| Sign Control | Free | | | Free | Yield | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 538 | 31 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | 1002 | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | | 0 | 269 | 0 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | | 0 | 269 | 0 |
| tC, single (s) | | | | 4.3 | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | | 2.3 | 3.6 | 3.4 |
| p0 queue free % | | | | 100 | 95 | 100 |
| cM capacity (veh/h) | | | | 1579 | 681 | 1065 |

| Direction, Lane # | WB 1 | WB 2 | NB 1 |
|------------------------|------|------|------|
| Volume Total | 179 | 359 | 31 |
| Volume Left | 0 | 0 | 31 |
| Volume Right | 0 | 0 | 0 |
| cSH | 1579 | 1700 | 681 |
| Volume to Capacity | 0.00 | 0.21 | 0.05 |
| Queue Length 95th (ft) | 0 | 0 | 4 |
| Control Delay (s) | 0.0 | 0.0 | 10.5 |
| Lane LOS | B | | |
| Approach Delay (s) | 0.0 | 10.5 | |
| Approach LOS | B | | |

| Intersection Summary | | | |
|-----------------------------------|-------|----------------------|---|
| Average Delay | 0.6 | | |
| Intersection Capacity Utilization | 43.9% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

40: US 50 EB #2 & 29 1/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Lane Configurations | | ↕↕ | | | | | | ↕ | | | ↕ | |
| Volume (veh/h) | 0 | 620 | 20 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Yield | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Hourly flow rate (vph) | 0 | 721 | 23 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | 969 | | | | | | | | | | |
| pX, platoon unblocked | | | | 0.98 | | | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| vC, conflicting volume | 0 | | | 744 | | | 733 | 733 | 372 | 376 | 744 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 695 | | | 683 | 683 | 315 | 319 | 695 | 0 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 100 | 91 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1579 | | | 839 | | | 317 | 351 | 649 | 543 | 345 | 1065 |

| Direction, Lane # | EB 1 | EB 2 | NB 1 | SB 1 |
|------------------------|------|------|------|------|
| Volume Total | 360 | 384 | 31 | 0 |
| Volume Left | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 23 | 0 | 0 |
| cSH | 1579 | 1700 | 351 | 1700 |
| Volume to Capacity | 0.00 | 0.23 | 0.09 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 7 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 16.3 | 0.0 |
| Lane LOS | | | C | A |
| Approach Delay (s) | 0.0 | | 16.3 | 0.0 |
| Approach LOS | | | C | A |

| Intersection Summary | | | |
|-----------------------------------|-------|-----|----------------------|
| Average Delay | | 0.7 | |
| Intersection Capacity Utilization | 27.8% | | ICU Level of Service |
| Analysis Period (min) | | 15 | A |

HCM Unsignalized Intersection Capacity Analysis

41: US 50 #4 & 29 1/2 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 58 | 505 | 48 | 3 | 379 | 3 | 14 | 0 | 3 | 4 | 1 | 47 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Hourly flow rate (vph) | 64 | 555 | 53 | 3 | 416 | 3 | 15 | 0 | 3 | 4 | 1 | 52 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 420 | | | 608 | | | 949 | 1109 | 277 | 828 | 1158 | 208 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 420 | | | 608 | | | 949 | 1109 | 277 | 828 | 1158 | 208 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 94 | | | 100 | | | 92 | 100 | 100 | 98 | 99 | 93 |
| cM capacity (veh/h) | 1094 | | | 927 | | | 183 | 187 | 702 | 240 | 174 | 779 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 64 | 277 | 277 | 53 | 3 | 208 | 208 | 3 | 19 | 57 |
| Volume Left | 64 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 15 | 4 |
| Volume Right | 0 | 0 | 0 | 53 | 0 | 0 | 0 | 3 | 3 | 52 |
| cSH | 1094 | 1700 | 1700 | 1700 | 927 | 1700 | 1700 | 1700 | 210 | 629 |
| Volume to Capacity | 0.06 | 0.16 | 0.16 | 0.03 | 0.00 | 0.12 | 0.12 | 0.00 | 0.09 | 0.09 |
| Queue Length 95th (ft) | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 |
| Control Delay (s) | 8.5 | 0.0 | 0.0 | 0.0 | 8.9 | 0.0 | 0.0 | 0.0 | 23.8 | 11.3 |
| Lane LOS | A | | | | A | | | | C | B |
| Approach Delay (s) | 0.8 | | | | 0.1 | | | | 23.8 | 11.3 |
| Approach LOS | | | | | | | | | C | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 1.4 |
| Intersection Capacity Utilization | 32.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

42: US 50 #4 & 29 3/4 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↗ | ↑↑ | ↘ | ↗ | ↑↑ | ↘ | | ↕ | | | ↕ | |
| Volume (veh/h) | 3 | 522 | 27 | 12 | 343 | 4 | 20 | 0 | 2 | 3 | 1 | 10 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Hourly flow rate (vph) | 3 | 587 | 30 | 13 | 385 | 4 | 22 | 0 | 2 | 3 | 1 | 11 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 390 | | | 617 | | | 825 | 1010 | 293 | 715 | 1036 | 193 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 390 | | | 617 | | | 825 | 1010 | 293 | 715 | 1036 | 193 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 99 | | | 91 | 100 | 100 | 99 | 99 | 99 |
| cM capacity (veh/h) | 1123 | | | 919 | | | 247 | 225 | 686 | 302 | 217 | 798 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 3 | 293 | 293 | 30 | 13 | 193 | 193 | 4 | 25 | 16 |
| Volume Left | 3 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 22 | 3 |
| Volume Right | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 4 | 2 | 11 |
| cSH | 1123 | 1700 | 1700 | 1700 | 919 | 1700 | 1700 | 1700 | 262 | 517 |
| Volume to Capacity | 0.00 | 0.17 | 0.17 | 0.02 | 0.01 | 0.11 | 0.11 | 0.00 | 0.09 | 0.03 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 8 | 2 |
| Control Delay (s) | 8.2 | 0.0 | 0.0 | 0.0 | 9.0 | 0.0 | 0.0 | 0.0 | 20.2 | 12.2 |
| Lane LOS | A | | | | A | | | | C | B |
| Approach Delay (s) | 0.0 | | | | 0.3 | | | | 20.2 | 12.2 |
| Approach LOS | | | | | | | | | C | B |

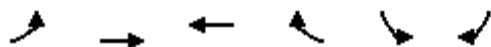
Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.8 |
| Intersection Capacity Utilization | 25.1% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

43: US 50 #4 & 30 Rd

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↶ | ↷ | ↷ | ↷ | ↶ | ↶ |
| Volume (veh/h) | 5 | 520 | 363 | 12 | 0 | 0 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Hourly flow rate (vph) | 5 | 542 | 378 | 12 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 391 | | | | 659 | 189 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 391 | | | | 659 | 189 |
| tC, single (s) | 4.3 | | | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.3 | | | | 3.6 | 3.4 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 1123 | | | | 381 | 802 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | SB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 5 | 271 | 271 | 189 | 189 | 12 | 0 |
| Volume Left | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| cSH | 1123 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.00 | 0.16 | 0.16 | 0.11 | 0.11 | 0.01 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | A | | | | | | A |
| Approach Delay (s) | 0.1 | | | 0.0 | | | 0.0 |
| Approach LOS | | | | | | | A |

| Intersection Summary | | | | | | | |
|-----------------------------------|--|--|-------|--|----------------------|--|---|
| Average Delay | | | 0.0 | | | | |
| Intersection Capacity Utilization | | | 17.7% | | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | | |

HCM Unsignalized Intersection Capacity Analysis
 44: US 50 #4 & S Frontage Rd

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | ↙ | ↑↑ | ↘ | |
| Volume (veh/h) | 554 | 2 | 3 | 366 | 0 | 1 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Hourly flow rate (vph) | 565 | 2 | 3 | 373 | 0 | 1 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 567 | | 759 | 284 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 567 | | 759 | 284 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | | | | |
| | | | | 100 | 100 | 100 |
| cM capacity (veh/h) | | | 960 | | | 696 |

| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|
| Volume Total | 377 | 190 | 3 | 187 | 187 | 1 |
| Volume Left | 0 | 0 | 3 | 0 | 0 | 0 |
| Volume Right | 0 | 2 | 0 | 0 | 0 | 1 |
| cSH | 1700 | 1700 | 960 | 1700 | 1700 | 696 |
| Volume to Capacity | 0.22 | 0.11 | 0.00 | 0.11 | 0.11 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 8.8 | 0.0 | 0.0 | 10.2 |
| Lane LOS | A | | | B | | |
| Approach Delay (s) | 0.0 | | 0.1 | | | 10.2 |
| Approach LOS | | | | | | B |

| Intersection Summary | | | | | | |
|-----------------------------------|--|--|-------|----------------------|--|---|
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 25.4% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

45: US 50 #4 & 31 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 22 | 489 | 27 | 10 | 350 | 4 | 27 | 1 | 10 | 9 | 1 | 8 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 23 | 520 | 29 | 11 | 372 | 4 | 29 | 1 | 11 | 10 | 1 | 9 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | 2 | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 377 | | | 520 | | | 784 | 965 | 260 | 701 | 961 | 186 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 377 | | | 520 | | | 784 | 965 | 260 | 701 | 961 | 186 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 98 | | | 99 | | | 89 | 100 | 99 | 97 | 100 | 99 |
| cM capacity (veh/h) | 1137 | | | 1001 | | | 263 | 236 | 721 | 301 | 237 | 806 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 23 | 260 | 260 | 29 | 11 | 186 | 186 | 4 | 40 | 19 |
| Volume Left | 23 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 29 | 10 |
| Volume Right | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 4 | 11 | 9 |
| cSH | 1137 | 1700 | 1700 | 1700 | 1001 | 1700 | 1700 | 1700 | 356 | 409 |
| Volume to Capacity | 0.02 | 0.15 | 0.15 | 0.02 | 0.01 | 0.11 | 0.11 | 0.00 | 0.11 | 0.05 |
| Queue Length 95th (ft) | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 10 | 4 |
| Control Delay (s) | 8.2 | 0.0 | 0.0 | 0.0 | 8.6 | 0.0 | 0.0 | 0.0 | 17.7 | 14.2 |
| Lane LOS | A | | | | A | | | | C | B |
| Approach Delay (s) | 0.3 | | | | 0.2 | | | | 17.7 | 14.2 |
| Approach LOS | | | | | | | | | C | B |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 1.3 |
| Intersection Capacity Utilization | 32.7% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

47: US 50 #7 & CDOT

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | ↑ | ↓ | ↑↑↑ | ↓ | ↓ |
| Volume (veh/h) | 673 | 3 | 3 | 415 | 17 | 2 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly flow rate (vph) | 748 | 3 | 3 | 461 | 19 | 2 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 751 | | 908 | 374 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 751 | | 908 | 374 |
| tC, single (s) | | | 4.3 | | 7.0 | 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | 3.6 | 3.4 |
| p0 queue free % | | | 100 | | 93 | 100 |
| cM capacity (veh/h) | | | 816 | | 263 | 607 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 374 | 374 | 3 | 3 | 154 | 154 | 154 | 21 |
| Volume Left | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 19 |
| Volume Right | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 2 |
| cSH | 1700 | 1700 | 1700 | 816 | 1700 | 1700 | 1700 | 279 |
| Volume to Capacity | 0.22 | 0.22 | 0.00 | 0.00 | 0.09 | 0.09 | 0.09 | 0.08 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 | 0.0 | 18.9 |
| Lane LOS | | | | A | | | | C |
| Approach Delay (s) | 0.0 | | | 0.1 | | 18.9 | | |
| Approach LOS | | | | | | | C | |

Intersection Summary

| | | |
|-----------------------------------|-------|------------------------|
| Average Delay | 0.3 | |
| Intersection Capacity Utilization | 28.6% | ICU Level of Service A |
| Analysis Period (min) | 15 | |

HCM Unsignalized Intersection Capacity Analysis
 48: US 50 #7 & Willow Bend Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ | | ↕ | | | ↕ | |
| Volume (veh/h) | 0 | 672 | 8 | 0 | 464 | 2 | 3 | 0 | 1 | 0 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Hourly flow rate (vph) | 0 | 738 | 9 | 0 | 510 | 2 | 3 | 0 | 1 | 0 | 0 | 0 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 512 | | | 747 | | | 993 | 1251 | 369 | 879 | 1257 | 255 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 512 | | | 747 | | | 993 | 1251 | 369 | 879 | 1257 | 255 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 98 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1009 | | | 819 | | | 191 | 163 | 611 | 232 | 162 | 726 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 0 | 369 | 369 | 9 | 0 | 255 | 255 | 2 | 4 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Volume Right | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 2 | 1 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 231 | 1700 |
| Volume to Capacity | 0.00 | 0.22 | 0.22 | 0.01 | 0.00 | 0.15 | 0.15 | 0.00 | 0.02 | 0.00 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 |
| Lane LOS | | | | | | | | | C | A |
| Approach Delay (s) | 0.0 | | | | 0.0 | | | | 20.9 | 0.0 |
| Approach LOS | | | | | | | | | C | A |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.1 |
| Intersection Capacity Utilization | 28.6% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

49: US 50 #7 & 3247

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (veh/h) | 0 | 670 | 2 | 0 | 461 | 2 | 1 | 0 | 2 | 2 | 0 | 2 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Hourly flow rate (vph) | 0 | 736 | 2 | 0 | 507 | 2 | 1 | 0 | 2 | 2 | 0 | 2 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 509 | | | 738 | | | 993 | 1246 | 369 | 878 | 1246 | 254 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 509 | | | 738 | | | 993 | 1246 | 369 | 878 | 1246 | 254 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 100 | | | 100 | | | 99 | 100 | 100 | 99 | 100 | 100 |
| cM capacity (veh/h) | 1012 | | | 825 | | | 191 | 164 | 611 | 232 | 164 | 727 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|
| Volume Total | 0 | 491 | 248 | 0 | 338 | 171 | 3 | 4 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Volume Right | 0 | 0 | 2 | 0 | 0 | 2 | 2 | 2 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 352 | 352 |
| Volume to Capacity | 0.00 | 0.29 | 0.15 | 0.00 | 0.20 | 0.10 | 0.01 | 0.01 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.3 | 15.4 |
| Lane LOS | | | | | | | C | C |
| Approach Delay (s) | 0.0 | | | 0.0 | | | 15.3 | 15.4 |
| Approach LOS | | | | | | | C | C |

Intersection Summary

| | |
|-----------------------------------|-------|
| Average Delay | 0.1 |
| Intersection Capacity Utilization | 28.6% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM Unsignalized Intersection Capacity Analysis

50: US 50 #7 & 1st St

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↑ | ↓ | ↑↑ | ↓ | |
| Volume (veh/h) | 685 | 9 | 1 | 470 | 12 | 7 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 737 | 10 | 1 | 505 | 13 | 8 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 746 | | | 991 368 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 746 | | | 991 368 |
| tC, single (s) | | | 4.3 | | | 7.0 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | | 3.6 3.4 |
| p0 queue free % | | | 100 | | | 94 99 |
| cM capacity (veh/h) | | | 819 | | | 232 612 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 368 | 368 | 10 | 1 | 253 | 253 | 20 |
| Volume Left | 0 | 0 | 0 | 1 | 0 | 0 | 13 |
| Volume Right | 0 | 0 | 10 | 0 | 0 | 0 | 8 |
| cSH | 1700 | 1700 | 1700 | 819 | 1700 | 1700 | 301 |
| Volume to Capacity | 0.22 | 0.22 | 0.01 | 0.00 | 0.15 | 0.15 | 0.07 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 | 17.8 |
| Lane LOS | | | | A | C | | |
| Approach Delay (s) | 0.0 | | | 0.0 | | 17.8 | |
| Approach LOS | | | | | | C | |

| Intersection Summary | | | |
|-----------------------------------|-------|--|------------------------|
| Average Delay | | | 0.3 |
| Intersection Capacity Utilization | 28.9% | | ICU Level of Service A |
| Analysis Period (min) | | | 15 |

HCM Unsignalized Intersection Capacity Analysis

51: US 50 #7 & 3rd St

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | | ↕ | | | ↕ | |
| Volume (veh/h) | 80 | 614 | 1 | 2 | 454 | 7 | 3 | 2 | 3 | 5 | 1 | 30 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Hourly flow rate (vph) | 82 | 633 | 1 | 2 | 468 | 7 | 3 | 2 | 3 | 5 | 1 | 31 |
| Pedestrians | | | | | | | | | | | | |
| Lane Width (ft) | | | | | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | | | | | |
| Percent Blockage | | | | | | | | | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 475 | | | 634 | | | 1068 | 1277 | 316 | 958 | 1271 | 234 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 475 | | | 634 | | | 1068 | 1277 | 316 | 958 | 1271 | 234 |
| tC, single (s) | 4.3 | | | 4.3 | | | 7.7 | 6.7 | 7.1 | 7.7 | 6.7 | 7.1 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.3 | | | 2.3 | | | 3.6 | 4.1 | 3.4 | 3.6 | 4.1 | 3.4 |
| p0 queue free % | 92 | | | 100 | | | 98 | 99 | 100 | 97 | 99 | 96 |
| cM capacity (veh/h) | 1042 | | | 905 | | | 151 | 144 | 662 | 188 | 146 | 750 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | EB 4 | WB 1 | WB 2 | WB 3 | WB 4 | NB 1 | SB 1 |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Volume Total | 82 | 316 | 316 | 1 | 2 | 234 | 234 | 7 | 8 | 37 |
| Volume Left | 82 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 5 |
| Volume Right | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 7 | 3 | 31 |
| cSH | 1042 | 1700 | 1700 | 1700 | 905 | 1700 | 1700 | 1700 | 209 | 490 |
| Volume to Capacity | 0.08 | 0.19 | 0.19 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.04 | 0.08 |
| Queue Length 95th (ft) | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 |
| Control Delay (s) | 8.8 | 0.0 | 0.0 | 0.0 | 9.0 | 0.0 | 0.0 | 0.0 | 22.9 | 13.0 |
| Lane LOS | A | | | | A | | | | C | B |
| Approach Delay (s) | 1.0 | | | | 0.0 | | | | 22.9 | 13.0 |
| Approach LOS | | | | | | | | | C | B |

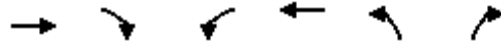
Intersection Summary

| | | | | | | | | | | |
|-----------------------------------|--|-------|--|----------------------|--|--|--|--|---|--|
| Average Delay | | 1.1 | | | | | | | | |
| Intersection Capacity Utilization | | 33.6% | | ICU Level of Service | | | | | A | |
| Analysis Period (min) | | 15 | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

52: US 50 #7 & SH 141A

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------|------|------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↑ | ↓ | ↑↑ | ↓ | |
| Volume (veh/h) | 544 | 67 | 8 | 409 | 58 | 4 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly flow rate (vph) | 573 | 71 | 8 | 431 | 61 | 4 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 643 | | | 805 286 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 643 | | | 805 286 |
| tC, single (s) | | | 4.3 | | | 7.0 7.1 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.3 | | | 3.6 3.4 |
| p0 queue free % | | | 99 | | | 80 99 |
| cM capacity (veh/h) | | | 898 | | | 305 693 |

| Direction, Lane # | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 |
|------------------------|------|------|------|------|------|------|------|
| Volume Total | 286 | 286 | 71 | 8 | 215 | 215 | 65 |
| Volume Left | 0 | 0 | 0 | 8 | 0 | 0 | 61 |
| Volume Right | 0 | 0 | 71 | 0 | 0 | 0 | 4 |
| cSH | 1700 | 1700 | 1700 | 898 | 1700 | 1700 | 317 |
| Volume to Capacity | 0.17 | 0.17 | 0.04 | 0.01 | 0.13 | 0.13 | 0.21 |
| Queue Length 95th (ft) | 0 | 0 | 0 | 1 | 0 | 0 | 19 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 9.0 | 0.0 | 0.0 | 19.3 |
| Lane LOS | | | | A | C | | |
| Approach Delay (s) | 0.0 | | | 0.2 | | 19.3 | |
| Approach LOS | | | | | | C | |

| Intersection Summary | | | |
|-----------------------------------|-------|--|------------------------|
| Average Delay | | | 1.2 |
| Intersection Capacity Utilization | 25.2% | | ICU Level of Service A |
| Analysis Period (min) | | | 15 |

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

HCM Signalized Intersection Capacity Analysis

4: US 50 #1 & Unawweep Ave

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|-------|-------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗↗ | ↖ | ↖ | ↗↗ | ↖ | | ↖ | ↖ | | ↖ | ↖ |
| Volume (vph) | 251 | 1496 | 5 | 1 | 803 | 0 | 39 | 11 | 8 | 8 | 0 | 192 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | | 5.0 | 5.0 | | 5.0 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | | 0.96 | 1.00 | | 0.95 | 1.00 |
| Satd. Flow (prot) | 1671 | 3343 | 1495 | 1671 | 3343 | | | 1694 | 1495 | | 1671 | 1495 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | | 0.77 | 1.00 | | 0.72 | 1.00 |
| Satd. Flow (perm) | 1671 | 3343 | 1495 | 1671 | 3343 | | | 1353 | 1495 | | 1271 | 1495 |
| Peak-hour factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 267 | 1591 | 5 | 1 | 854 | 0 | 41 | 12 | 9 | 9 | 0 | 204 |
| RTOR Reduction (vph) | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 267 | 1591 | 4 | 1 | 854 | 0 | 0 | 53 | 1 | 0 | 9 | 204 |
| Turn Type | Prot | | Perm | Prot | | Perm | Perm | | Perm | Perm | | Over |
| Protected Phases | 1 | 6 | | 5 | 2 | | | 4 | | | 4 | 1 |
| Permitted Phases | | | 6 | | | 2 | 4 | | 4 | 4 | | |
| Actuated Green, G (s) | 24.3 | 75.6 | 75.6 | 1.1 | 52.4 | | | 8.3 | 8.3 | | 8.3 | 24.3 |
| Effective Green, g (s) | 24.3 | 75.6 | 75.6 | 1.1 | 52.4 | | | 8.3 | 8.3 | | 8.3 | 24.3 |
| Actuated g/C Ratio | 0.24 | 0.76 | 0.76 | 0.01 | 0.52 | | | 0.08 | 0.08 | | 0.08 | 0.24 |
| Clearance Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | | 5.0 | 5.0 | | 5.0 | 4.0 |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | 2.5 | 3.5 | | | 3.0 | 3.0 | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 406 | 2527 | 1130 | 18 | 1752 | | | 112 | 124 | | 105 | 363 |
| v/s Ratio Prot | c0.16 | c0.48 | | 0.00 | 0.26 | | | | | | | 0.14 |
| v/s Ratio Perm | | | 0.00 | | | | | c0.04 | 0.00 | | 0.01 | |
| v/c Ratio | 0.66 | 0.63 | 0.00 | 0.06 | 0.49 | | | 0.47 | 0.01 | | 0.09 | 0.56 |
| Uniform Delay, d1 | 34.1 | 5.7 | 3.0 | 48.9 | 15.2 | | | 43.8 | 42.1 | | 42.3 | 33.2 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Incremental Delay, d2 | 3.8 | 1.2 | 0.0 | 0.9 | 1.0 | | | 3.1 | 0.0 | | 0.4 | 2.0 |
| Delay (s) | 37.9 | 6.9 | 3.0 | 49.9 | 16.2 | | | 46.9 | 42.1 | | 42.7 | 35.2 |
| Level of Service | D | A | A | D | B | | | D | D | | D | D |
| Approach Delay (s) | | 11.3 | | | 16.2 | | | 46.2 | | | 35.5 | |
| Approach LOS | | B | | | B | | | D | | | D | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|-----|
| HCM Average Control Delay | 15.2 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.60 | | |
| Actuated Cycle Length (s) | 100.0 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 66.6% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

13: US 50 #1 & 27 Rd

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|-------|-------|------|-------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 66 | 1323 | 75 | 27 | 675 | 50 | 87 | 36 | 20 | 85 | 41 | 8 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 7.0 | 7.0 | 4.0 | 7.0 | 7.0 | | 5.5 | 5.5 | | 5.5 | 5.5 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | | 1.00 | 0.85 | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | | 0.97 | 1.00 | | 0.97 | 1.00 |
| Satd. Flow (prot) | 1671 | 3343 | 1495 | 1671 | 3343 | 1495 | | 1699 | 1495 | | 1702 | 1495 |
| Flt Permitted | 0.35 | 1.00 | 1.00 | 0.14 | 1.00 | 1.00 | | 0.66 | 1.00 | | 0.68 | 1.00 |
| Satd. Flow (perm) | 615 | 3343 | 1495 | 243 | 3343 | 1495 | | 1155 | 1495 | | 1188 | 1495 |
| Peak-hour factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 70 | 1407 | 80 | 29 | 718 | 53 | 93 | 38 | 21 | 90 | 44 | 9 |
| RTOR Reduction (vph) | 0 | 0 | 18 | 0 | 0 | 16 | 0 | 0 | 17 | 0 | 0 | 7 |
| Lane Group Flow (vph) | 70 | 1407 | 62 | 29 | 718 | 37 | 0 | 131 | 4 | 0 | 134 | 2 |
| Turn Type | pm+pt | | Perm | pm+pt | | Perm | Perm | | Perm | Perm | | Perm |
| Protected Phases | 1 | 6 | | 5 | 2 | | | 4 | | | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | 4 | | 4 | 8 | | 8 |
| Actuated Green, G (s) | 68.4 | 63.4 | 63.4 | 65.0 | 61.7 | 61.7 | | 16.8 | 16.8 | | 16.8 | 16.8 |
| Effective Green, g (s) | 68.4 | 63.4 | 63.4 | 65.0 | 61.7 | 61.7 | | 16.8 | 16.8 | | 16.8 | 16.8 |
| Actuated g/C Ratio | 0.68 | 0.63 | 0.63 | 0.65 | 0.62 | 0.62 | | 0.17 | 0.17 | | 0.17 | 0.17 |
| Clearance Time (s) | 4.0 | 7.0 | 7.0 | 4.0 | 7.0 | 7.0 | | 5.5 | 5.5 | | 5.5 | 5.5 |
| Vehicle Extension (s) | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | | 3.0 | 3.0 | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 473 | 2119 | 948 | 205 | 2063 | 922 | | 194 | 251 | | 200 | 251 |
| v/s Ratio Prot | c0.01 | c0.42 | | 0.00 | 0.21 | | | | | | | |
| v/s Ratio Perm | 0.09 | | 0.04 | 0.09 | | 0.02 | | c0.11 | 0.00 | | 0.11 | 0.00 |
| v/c Ratio | 0.15 | 0.66 | 0.07 | 0.14 | 0.35 | 0.04 | | 0.68 | 0.01 | | 0.67 | 0.01 |
| Uniform Delay, d1 | 5.3 | 11.6 | 7.0 | 7.8 | 9.3 | 7.5 | | 39.0 | 34.7 | | 39.0 | 34.6 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.1 | 1.7 | 0.1 | 0.2 | 0.5 | 0.1 | | 8.9 | 0.0 | | 8.5 | 0.0 |
| Delay (s) | 5.4 | 13.2 | 7.1 | 8.0 | 9.8 | 7.6 | | 48.0 | 34.7 | | 47.5 | 34.7 |
| Level of Service | A | B | A | A | A | A | | D | C | | D | C |
| Approach Delay (s) | | 12.6 | | | 9.6 | | | 46.2 | | | 46.7 | |
| Approach LOS | | B | | | A | | | D | | | D | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 15.4 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.63 | | |
| Actuated Cycle Length (s) | 100.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 67.2% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

33: US 50 WB #3 & 29 Rd

10/28/2008



| Movement | WBT | WBR | SBT | SBR2 | NEL |
|------------------------|-------|------|-------|------|-------|
| Lane Configurations | ↑↑ | ↑ | ↑↑ | ↑ | ↑ |
| Volume (vph) | 421 | 73 | 95 | 109 | 119 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 9.0 | 9.0 | 6.5 | 6.5 | 6.0 |
| Lane Util. Factor | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 |
| Frt | 1.00 | 0.85 | 1.00 | 0.85 | 1.00 |
| Flt Protected | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 |
| Satd. Flow (prot) | 3343 | 1495 | 3343 | 1495 | 1671 |
| Flt Permitted | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 |
| Satd. Flow (perm) | 3343 | 1495 | 3343 | 1495 | 1671 |
| Peak-hour factor, PHF | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 453 | 78 | 102 | 117 | 128 |
| RTOR Reduction (vph) | 0 | 39 | 0 | 101 | 0 |
| Lane Group Flow (vph) | 453 | 39 | 102 | 16 | 128 |
| Turn Type | | Perm | | Perm | |
| Protected Phases | 6 | | 4 | | 5 |
| Permitted Phases | | 6 | | 4 | |
| Actuated Green, G (s) | 44.9 | 44.9 | 12.3 | 12.3 | 11.3 |
| Effective Green, g (s) | 44.9 | 44.9 | 12.3 | 12.3 | 11.3 |
| Actuated g/C Ratio | 0.50 | 0.50 | 0.14 | 0.14 | 0.13 |
| Clearance Time (s) | 9.0 | 9.0 | 6.5 | 6.5 | 6.0 |
| Vehicle Extension (s) | 4.0 | 4.0 | 6.0 | 6.0 | 2.0 |
| Lane Grp Cap (vph) | 1668 | 746 | 457 | 204 | 210 |
| v/s Ratio Prot | c0.14 | | c0.03 | | c0.08 |
| v/s Ratio Perm | | 0.03 | | 0.01 | |
| v/c Ratio | 0.27 | 0.05 | 0.22 | 0.08 | 0.61 |
| Uniform Delay, d1 | 13.1 | 11.6 | 34.6 | 33.9 | 37.3 |
| Progression Factor | 1.67 | 3.61 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.4 | 0.1 | 0.7 | 0.5 | 3.4 |
| Delay (s) | 22.2 | 42.0 | 35.3 | 34.4 | 40.7 |
| Level of Service | C | D | D | C | D |
| Approach Delay (s) | 25.2 | | 34.8 | | 40.7 |
| Approach LOS | C | | C | | D |

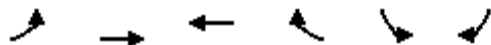
Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 29.8 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.32 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 21.5 |
| Intersection Capacity Utilization | 42.0% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

34: US 50 EB #2 & 29 Rd

10/28/2008



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|-------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | | | ↑↑ | |
| Volume (vph) | 0 | 577 | 0 | 0 | 96 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 6.0 | | | 6.5 | |
| Lane Util. Factor | | 0.95 | | | 0.97 | |
| Fr _t | | 1.00 | | | 1.00 | |
| Fl _t Protected | | 1.00 | | | 0.95 | |
| Satd. Flow (prot) | | 3343 | | | 3242 | |
| Fl _t Permitted | | 1.00 | | | 0.95 | |
| Satd. Flow (perm) | | 3343 | | | 3242 | |
| Peak-hour factor, PHF | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 0 | 620 | 0 | 0 | 103 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 89 | 0 |
| Lane Group Flow (vph) | 0 | 620 | 0 | 0 | 14 | 0 |
| Turn Type | | | | | | |
| Protected Phases | | 2 | | | 4 | |
| Permitted Phases | | | | | | |
| Actuated Green, G (s) | | 65.2 | | | 12.3 | |
| Effective Green, g (s) | | 65.2 | | | 12.3 | |
| Actuated g/C Ratio | | 0.72 | | | 0.14 | |
| Clearance Time (s) | | 6.0 | | | 6.5 | |
| Vehicle Extension (s) | | 3.0 | | | 6.0 | |
| Lane Grp Cap (vph) | | 2422 | | | 443 | |
| v/s Ratio Prot | | c0.19 | | | c0.00 | |
| v/s Ratio Perm | | | | | | |
| v/c Ratio | | 0.26 | | | 0.03 | |
| Uniform Delay, d ₁ | | 4.2 | | | 33.7 | |
| Progression Factor | | 1.00 | | | 1.00 | |
| Incremental Delay, d ₂ | | 0.3 | | | 0.1 | |
| Delay (s) | | 4.5 | | | 33.8 | |
| Level of Service | | A | | | C | |
| Approach Delay (s) | | 4.5 | 0.0 | | 33.8 | |
| Approach LOS | | A | A | | C | |
| Intersection Summary | | | | | | |
| HCM Average Control Delay | | | 8.6 | | HCM Level of Service | A |
| HCM Volume to Capacity ratio | | | 0.22 | | | |
| Actuated Cycle Length (s) | | | 90.0 | | Sum of lost time (s) | 12.5 |
| Intersection Capacity Utilization | | | 32.2% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |
| c Critical Lane Group | | | | | | |

HCM Signalized Intersection Capacity Analysis

35: US 50 WB #3 & Sundance Dr

10/28/2008



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|-----------------------------------|------|------|------|-------|-------|------|
| Lane Configurations | | | | ↑↑ | ↑ | |
| Volume (vph) | 0 | 0 | 0 | 495 | 12 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | | | 6.0 | 6.0 | |
| Lane Util. Factor | | | | 0.95 | 1.00 | |
| Fr _t | | | | 1.00 | 1.00 | |
| Fl _t Protected | | | | 1.00 | 0.95 | |
| Satd. Flow (prot) | | | | 3343 | 1671 | |
| Fl _t Permitted | | | | 1.00 | 0.95 | |
| Satd. Flow (perm) | | | | 3343 | 1671 | |
| Peak-hour factor, PHF | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 0 | 0 | 0 | 556 | 13 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 10 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 0 | 556 | 3 | 0 |
| Turn Type | | | | | | |
| Protected Phases | | | | 6 | 5 | 8 |
| Permitted Phases | | | | | | |
| Actuated Green, G (s) | | | | 55.6 | 22.4 | |
| Effective Green, g (s) | | | | 55.6 | 22.4 | |
| Actuated g/C Ratio | | | | 0.62 | 0.25 | |
| Clearance Time (s) | | | | 6.0 | | |
| Vehicle Extension (s) | | | | 3.0 | | |
| Lane Grp Cap (vph) | | | | 2065 | 416 | |
| v/s Ratio Prot | | | | c0.17 | c0.00 | |
| v/s Ratio Perm | | | | | | |
| v/c Ratio | | | | 0.27 | 0.01 | |
| Uniform Delay, d ₁ | | | | 7.9 | 25.4 | |
| Progression Factor | | | | 1.00 | 1.00 | |
| Incremental Delay, d ₂ | | | | 0.3 | 0.0 | |
| Delay (s) | | | | 8.2 | 25.4 | |
| Level of Service | | | | A | C | |
| Approach Delay (s) | 0.0 | | | 8.2 | 25.4 | |
| Approach LOS | A | | | A | C | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 8.6 | HCM Level of Service | A |
| HCM Volume to Capacity ratio | 0.19 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 12.0 |
| Intersection Capacity Utilization | 33.7% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

36: Sundance Dr &

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|-------|------|------|-------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↖ | | | ↖ | | | | ↑ | | | | |
| Volume (vph) | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 6.0 | | | 3.5 | | | | 6.0 | | | | |
| Lane Util. Factor | 1.00 | | | 1.00 | | | | 1.00 | | | | |
| Frt | 1.00 | | | 1.00 | | | | 1.00 | | | | |
| Flt Protected | 0.95 | | | 0.95 | | | | 1.00 | | | | |
| Satd. Flow (prot) | 1671 | | | 1671 | | | | 1759 | | | | |
| Flt Permitted | 0.95 | | | 0.95 | | | | 1.00 | | | | |
| Satd. Flow (perm) | 1671 | | | 1671 | | | | 1759 | | | | |
| Peak-hour factor, PHF | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 6 | 0 | 0 | 3 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 |
| Turn Type | Prot | | | Prot | | | | | | | | |
| Protected Phases | 5 | | | 1 | | | | 8 | | | | |
| Permitted Phases | | | | | | | | | | | | |
| Actuated Green, G (s) | 12.0 | | | 1.3 | | | | 4.4 | | | | |
| Effective Green, g (s) | 12.0 | | | 1.3 | | | | 4.4 | | | | |
| Actuated g/C Ratio | 0.13 | | | 0.01 | | | | 0.05 | | | | |
| Clearance Time (s) | 6.0 | | | 3.5 | | | | 6.0 | | | | |
| Vehicle Extension (s) | 3.0 | | | 3.0 | | | | 3.0 | | | | |
| Lane Grp Cap (vph) | 223 | | | 24 | | | | 86 | | | | |
| v/s Ratio Prot | c0.00 | | | c0.00 | | | | c0.00 | | | | |
| v/s Ratio Perm | | | | | | | | | | | | |
| v/c Ratio | 0.00 | | | 0.12 | | | | 0.09 | | | | |
| Uniform Delay, d1 | 33.8 | | | 43.8 | | | | 40.9 | | | | |
| Progression Factor | 1.00 | | | 1.00 | | | | 0.33 | | | | |
| Incremental Delay, d2 | 0.0 | | | 2.3 | | | | 0.5 | | | | |
| Delay (s) | 33.8 | | | 46.1 | | | | 13.8 | | | | |
| Level of Service | C | | | D | | | | B | | | | |
| Approach Delay (s) | | 33.8 | | | 46.1 | | | 13.8 | | | 0.0 | |
| Approach LOS | | C | | | D | | | B | | | A | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 26.6 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.03 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 71.1 |
| Intersection Capacity Utilization | 17.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

37: US 50 EB #2 & Sundance Dr

10/28/2008



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|-------|------|------|------|------|------|-------|------|-------|-------|------|
| Lane Configurations | | ↑↑ | ↑ | | | | | ↑ | | | ↑ | |
| Volume (vph) | 0 | 646 | 23 | 0 | 0 | 0 | 0 | 7 | 10 | 0 | 3 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 6.0 | 6.0 | | | | | 6.0 | | | 3.5 | |
| Lane Util. Factor | | 0.95 | 1.00 | | | | | 1.00 | | | 1.00 | |
| Frt | | 1.00 | 0.85 | | | | | 0.92 | | | 1.00 | |
| Flt Protected | | 1.00 | 1.00 | | | | | 1.00 | | | 1.00 | |
| Satd. Flow (prot) | | 3343 | 1495 | | | | | 1622 | | | 1759 | |
| Flt Permitted | | 1.00 | 1.00 | | | | | 1.00 | | | 1.00 | |
| Satd. Flow (perm) | | 3343 | 1495 | | | | | 1622 | | | 1759 | |
| Peak-hour factor, PHF | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 0 | 726 | 26 | 0 | 0 | 0 | 0 | 8 | 11 | 0 | 3 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 0 | 726 | 20 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 3 | 0 |
| Turn Type | | Perm | | | | | | | | Split | | |
| Protected Phases | | 2 | | | | | | 8 | | 1 | 1 | |
| Permitted Phases | | | 2 | | | | | | | | | |
| Actuated Green, G (s) | | 68.8 | 68.8 | | | | | 4.4 | | | 1.3 | |
| Effective Green, g (s) | | 68.8 | 68.8 | | | | | 4.4 | | | 1.3 | |
| Actuated g/C Ratio | | 0.76 | 0.76 | | | | | 0.05 | | | 0.01 | |
| Clearance Time (s) | | 6.0 | 6.0 | | | | | 6.0 | | | 3.5 | |
| Vehicle Extension (s) | | 3.0 | 3.0 | | | | | 3.0 | | | 3.0 | |
| Lane Grp Cap (vph) | | 2556 | 1143 | | | | | 79 | | | 25 | |
| v/s Ratio Prot | | c0.22 | | | | | | c0.01 | | | c0.00 | |
| v/s Ratio Perm | | | 0.01 | | | | | | | | | |
| v/c Ratio | | 0.28 | 0.02 | | | | | 0.11 | | | 0.12 | |
| Uniform Delay, d1 | | 3.2 | 2.5 | | | | | 40.9 | | | 43.8 | |
| Progression Factor | | 0.84 | 0.76 | | | | | 1.00 | | | 0.04 | |
| Incremental Delay, d2 | | 0.3 | 0.0 | | | | | 0.6 | | | 2.1 | |
| Delay (s) | | 2.9 | 1.9 | | | | | 41.5 | | | 3.8 | |
| Level of Service | | A | A | | | | | D | | | A | |
| Approach Delay (s) | | 2.9 | | | 0.0 | | | 41.5 | | | 3.8 | |
| Approach LOS | | A | | | A | | | D | | | A | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 3.9 | HCM Level of Service | A |
| HCM Volume to Capacity ratio | 0.27 | | |
| Actuated Cycle Length (s) | 90.0 | Sum of lost time (s) | 15.5 |
| Intersection Capacity Utilization | 33.7% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM Signalized Intersection Capacity Analysis

46: US 50 #6 & 141B

10/28/2008



| Movement | WBT | WBR | NBT | SBL | SBR |
|------------------------|------|-------|-------|-------|--------|
| Lane Configurations | ↑↑ | ↑ | ↑ | ↑ | ↑ |
| Volume (vph) | 230 | 231 | 59 | 233 | 130 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 6.0 | 6.0 | 6.0 | 5.6 | 5.6 |
| Lane Util. Factor | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Satd. Flow (prot) | 3343 | 1495 | 1759 | 1671 | 1495 |
| Flt Permitted | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Satd. Flow (perm) | 3343 | 1495 | 1759 | 1671 | 1495 |
| Peak-hour factor, PHF | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 237 | 238 | 61 | 240 | 134 |
| RTOR Reduction (vph) | 0 | 104 | 0 | 0 | 83 |
| Lane Group Flow (vph) | 237 | 134 | 61 | 240 | 51 |
| Turn Type | | Perm | | Prot | custom |
| Protected Phases | 6 | | 5 | 4 | |
| Permitted Phases | | 6 | 5 | | 4 |
| Actuated Green, G (s) | 60.9 | 60.9 | 8.5 | 21.5 | 21.5 |
| Effective Green, g (s) | 60.9 | 60.9 | 8.5 | 21.5 | 21.5 |
| Actuated g/C Ratio | 0.56 | 0.56 | 0.08 | 0.20 | 0.20 |
| Clearance Time (s) | 6.0 | 6.0 | 6.0 | 5.6 | 5.6 |
| Vehicle Extension (s) | 5.0 | 5.0 | 4.0 | 4.0 | 4.0 |
| Lane Grp Cap (vph) | 1876 | 839 | 138 | 331 | 296 |
| v/s Ratio Prot | 0.07 | | c0.03 | c0.14 | |
| v/s Ratio Perm | | c0.09 | | | 0.03 |
| v/c Ratio | 0.13 | 0.16 | 0.44 | 0.73 | 0.17 |
| Uniform Delay, d1 | 11.2 | 11.5 | 47.7 | 40.7 | 36.1 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.1 | 0.4 | 3.1 | 8.2 | 0.4 |
| Delay (s) | 11.4 | 11.9 | 50.8 | 48.9 | 36.5 |
| Level of Service | B | B | D | D | D |
| Approach Delay (s) | 11.6 | | 50.8 | | |
| Approach LOS | B | | D | | |

Intersection Summary

| | | | |
|-----------------------------------|-------|----------------------|------|
| HCM Average Control Delay | 27.7 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.32 | | |
| Actuated Cycle Length (s) | 108.5 | Sum of lost time (s) | 17.6 |
| Intersection Capacity Utilization | 44.6% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

Arterial LOS

Arterial Level of Service: EB US 50 #1

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|-----------------|------|---------------|-----------------|-----------|----------------|
| Grand Mesa Ave | 1 | 0.4 | 10.9 | 0.1 | 45 |
| Gunnison Blvd | 6 | 0.1 | 4.3 | 0.0 | 42 |
| Santa Clara Ave | 8 | 0.3 | 6.8 | 0.1 | 44 |
| UnawEEP Ave | 11 | 1.4 | 11.3 | 0.1 | 38 |
| | 121 | 0.4 | 5.0 | 0.1 | 41 |
| | 14 | 0.1 | 3.5 | 0.0 | 42 |
| Green Acre 1 | 107 | 0.2 | 8.0 | 0.1 | 43 |
| Elm Park | 15 | 0.1 | 2.6 | 0.0 | 45 |
| Green Acre 2 | 19 | 0.2 | 5.5 | 0.1 | 41 |
| Aspen St | 24 | 0.1 | 3.3 | 0.0 | 44 |
| Palmer St | 20 | 0.2 | 6.0 | 0.1 | 43 |
| Palisade St | 27 | 0.2 | 6.3 | 0.1 | 46 |
| Linden Ave | 28 | 0.5 | 9.2 | 0.1 | 43 |
| 27 Rd | 32 | 8.2 | 31.1 | 0.3 | 34 |
| Dorothy Ave | 35 | 2.5 | 14.6 | 0.2 | 38 |
| EB Off-Ramp | 38 | 0.2 | 5.4 | 0.1 | 45 |
| EB On-Ramp | 40 | 0.2 | 9.3 | 0.1 | 46 |
| Frontage Rd | 43 | 0.6 | 17.0 | 0.2 | 42 |
| US 50 EB #2 | 117 | 0.1 | 4.4 | 0.1 | 44 |
| Total | | 16.2 | 164.3 | 1.9 | 41 |

Arterial Level of Service: WB US 50 #1

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|-----------------|------|---------------|-----------------|-----------|----------------|
| Frontage Rd | 43 | 0.6 | 4.6 | 0.1 | 43 |
| WB On-Ramp | 40 | 1.4 | 15.9 | 0.2 | 45 |
| EB Off-Ramp | 38 | 1.2 | 11.0 | 0.1 | 39 |
| Dorothy Ave | 35 | 1.3 | 7.3 | 0.1 | 33 |
| 27 Rd | 32 | 10.5 | 22.4 | 0.2 | 25 |
| | 28 | 4.6 | 26.5 | 0.3 | 40 |
| Palisade St | 27 | 1.1 | 10.9 | 0.1 | 36 |
| Palmer St | 20 | 0.5 | 6.9 | 0.1 | 42 |
| Aspen St | 24 | 0.5 | 6.3 | 0.1 | 41 |
| Green Acre 2 | 19 | 0.2 | 3.1 | 0.0 | 47 |
| Elm Park | 15 | 0.4 | 5.8 | 0.1 | 39 |
| Green Acre 1 | 107 | 0.2 | 2.6 | 0.0 | 43 |
| James St | 14 | 1.6 | 9.4 | 0.1 | 37 |
| | 121 | 2.4 | 5.5 | 0.0 | 26 |
| UnawEEP Ave | 11 | 12.3 | 16.4 | 0.1 | 12 |
| Santa Clara Ave | 8 | 4.6 | 14.2 | 0.1 | 31 |
| Gunnison Blvd | 6 | 1.0 | 7.0 | 0.1 | 42 |
| Grand Mesa Ave | 1 | 1.0 | 5.7 | 0.0 | 33 |
| Total | | 45.2 | 181.6 | 1.7 | 34 |

Arterial Level of Service: WB US 50 WB #3

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|--------------|------|---------------|-----------------|-----------|----------------|
| 29 1/4 Rd | 75 | 0.8 | 11.2 | 0.1 | 47 |
| | 138 | 0.4 | 8.9 | 0.1 | 44 |
| Sundance Dr | 71 | 2.8 | 9.3 | 0.1 | 31 |
| 29 Rd | 68 | 12.6 | 21.6 | 0.1 | 19 |
| Reta Dr | 66 | 2.6 | 8.5 | 0.1 | 31 |
| Elm Dr | 64 | 0.9 | 15.6 | 0.2 | 44 |
| Dee Vee Dr | 62 | 0.1 | 2.0 | 0.0 | 45 |
| Indiana St | 61 | 0.4 | 4.4 | 0.1 | 47 |
| Tennessee St | 59 | 0.5 | 5.7 | 0.1 | 49 |
| 28 1/2 Rd | 51 | 1.1 | 14.1 | 0.2 | 53 |
| Fairgrounds | 49 | 2.6 | 41.9 | 0.6 | 52 |
| | 127 | 0.5 | 9.2 | 0.1 | 43 |
| 27 3/4 Rd | 46 | 0.5 | 10.6 | 0.1 | 43 |
| | 130 | 0.4 | 8.8 | 0.1 | 43 |
| US 50 EB #2 | 117 | 0.6 | 13.8 | 0.2 | 42 |
| Total | | 26.8 | 185.7 | 2.2 | 43 |

Arterial Level of Service: EB US 50 EB #2

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|--------------|------|---------------|-----------------|-----------|----------------|
| 27 3/4 Rd | 110 | 0.5 | 21.5 | 0.3 | 44 |
| Fairgrounds | 109 | 0.5 | 19.2 | 0.2 | 44 |
| | 136 | 0.1 | 4.6 | 0.1 | 47 |
| KOA | 112 | 0.5 | 16.5 | 0.2 | 54 |
| 28 1/2 Rd | 54 | 0.7 | 19.9 | 0.3 | 54 |
| Rainbow Dr | 113 | 0.4 | 10.4 | 0.2 | 55 |
| Dee Vee Dr | 115 | 0.5 | 12.8 | 0.2 | 53 |
| Reta Dr | 56 | 0.4 | 16.3 | 0.2 | 47 |
| 29 Rd | 116 | 2.9 | 9.3 | 0.1 | 31 |
| | 133 | 1.0 | 5.7 | 0.1 | 37 |
| Sundance Dr | 114 | 2.5 | 7.0 | 0.1 | 29 |
| Redrock Rd | 118 | 1.0 | 9.9 | 0.1 | 41 |
| 29 1/4 Rd | 119 | 0.4 | 5.6 | 0.1 | 46 |
| US 50 WB #3 | 120 | 0.2 | 11.8 | 0.1 | 45 |
| Total | | 11.6 | 170.3 | 2.2 | 46 |

Arterial Level of Service: EB US 50 #4

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---------------|------|---------------|-----------------|------------|----------------|
| 29 1/2 Rd | 78 | 0.3 | 9.0 | 0.1 | 52 |
| | 131 | 0.2 | 6.5 | 0.1 | 53 |
| 29 3/4 Rd | 80 | 0.3 | 13.8 | 0.2 | 54 |
| 30 Rd | 84 | 0.4 | 18.7 | 0.3 | 55 |
| | 85 | 0.4 | 22.1 | 0.3 | 54 |
| S Frontage Rd | 124 | 0.5 | 22.9 | 0.3 | 53 |
| | 87 | 0.3 | 9.0 | 0.1 | 54 |
| US 50 EB #5 | 134 | 0.9 | 32.7 | 0.5 | 53 |
| Total | | 3.3 | 134.7 | 2.0 | 53 |

Arterial Level of Service: WB US 50 #4

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---------------|------|---------------|-----------------|------------|----------------|
| 31 Rd | 87 | 1.6 | 32.2 | 0.5 | 54 |
| | 124 | 0.4 | 9.4 | 0.1 | 52 |
| S Frontage Rd | 85 | 0.9 | 23.0 | 0.3 | 53 |
| 30 Rd | 84 | 1.0 | 22.4 | 0.3 | 53 |
| 29 3/4 Rd | 80 | 1.0 | 19.8 | 0.3 | 52 |
| | 131 | 0.8 | 14.5 | 0.2 | 51 |
| 29 1/2 Rd | 78 | 1.0 | 7.3 | 0.1 | 47 |
| US 50 WB #3 | 120 | 0.4 | 10.9 | 0.1 | 42 |
| Total | | 7.1 | 139.5 | 2.0 | 52 |

Arterial Level of Service: WB US 50 WB #6

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|--------------|------|---------------|-----------------|------------|----------------|
| 141B | 90 | 9.7 | 18.1 | 0.1 | 25 |
| US 50 EB #5 | 134 | 3.2 | 13.1 | 0.1 | 41 |
| Total | | 12.9 | 31.3 | 0.3 | 32 |

Arterial Level of Service: EB US 50 #7

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|----------------|------|---------------|-----------------|-----------|----------------|
| | 111 | 0.2 | 8.7 | 0.1 | 50 |
| CDOT | 92 | 0.2 | 6.5 | 0.1 | 54 |
| | 122 | 0.8 | 30.9 | 0.5 | 53 |
| | 142 | 1.2 | 37.9 | 0.6 | 53 |
| Willow Bend Rd | 94 | 0.6 | 9.3 | 0.1 | 53 |
| | 132 | 0.3 | 12.5 | 0.2 | 44 |
| 3247 | 97 | 1.3 | 36.1 | 0.5 | 52 |
| 1st St | 100 | 0.3 | 5.1 | 0.1 | 58 |
| 3rd St | 102 | 0.8 | 18.7 | 0.3 | 52 |
| SH 141A | 104 | 0.8 | 12.0 | 0.2 | 52 |
| | 72 | 0.3 | 10.3 | 0.1 | 43 |
| Total | | 6.8 | 187.9 | 2.7 | 52 |

Arterial Level of Service: WB US 50 #7

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|----------------|------|---------------|-----------------|-----------|----------------|
| | 72 | 0.3 | 5.6 | 0.1 | 44 |
| SH 141A | 104 | 0.2 | 9.0 | 0.1 | 49 |
| 3rd St | 102 | 0.8 | 11.9 | 0.2 | 52 |
| 1st St | 100 | 0.6 | 18.2 | 0.3 | 53 |
| 3247 | 97 | 0.4 | 5.6 | 0.1 | 53 |
| | 132 | 1.0 | 43.3 | 0.5 | 43 |
| Willow Bend Rd | 94 | 0.5 | 11.1 | 0.2 | 49 |
| | 142 | 0.4 | 9.4 | 0.1 | 52 |
| | 122 | 1.7 | 38.8 | 0.6 | 52 |
| CDOT | 92 | 0.9 | 29.4 | 0.5 | 56 |
| | 111 | 0.2 | 6.7 | 0.1 | 52 |
| US 50 EB #5 | 125 | 0.4 | 8.5 | 0.1 | 52 |
| Total | | 7.5 | 197.5 | 2.8 | 50 |

Arterial Level of Service: EB US 50 EB #5

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|--------------|------|---------------|-----------------|-----------|----------------|
| | 139 | 0.2 | 3.8 | 0.0 | 46 |
| | 140 | 0.7 | 10.0 | 0.1 | 52 |
| US 50 #7 | 125 | 0.4 | 6.5 | 0.1 | 46 |
| Total | | 1.2 | 20.3 | 0.3 | 49 |

Arterial Level of Service
Existing

3/12/2008

Arterial Level of Service: EB #1

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|-----------------|------|---------------|-----------------|-----------|----------------|-------------|-------------|
| Grand Mesa Ave | 1 | 1.2 | 11.9 | 0.1 | 42 | 43 | 1.0 |
| Gunnison Blvd | 6 | 0.4 | 4.5 | 0.0 | 39 | 40 | 0.4 |
| Santa Clara Ave | 8 | 0.9 | 7.5 | 0.1 | 39 | 40 | 0.9 |
| Unawweep Ave | 11 | 5.6 | 15.6 | 0.1 | 28 | 26 | 7.0 |
| | 121 | 1.4 | 6.0 | 0.1 | 34 | 34 | 1.5 |
| | 14 | 0.5 | 3.9 | 0.0 | 37 | 37 | 0.5 |
| Green Acre 1 | 107 | 1.2 | 9.0 | 0.1 | 39 | 39 | 1.3 |
| Elm Park | 15 | 0.5 | 3.0 | 0.0 | 39 | 39 | 0.5 |
| Green Acre 2 | 19 | 0.9 | 6.1 | 0.1 | 36 | 36 | 0.9 |
| Aspen St | 24 | 0.5 | 3.6 | 0.0 | 41 | 40 | 0.5 |
| Palmer St | 20 | 0.7 | 6.4 | 0.1 | 40 | 40 | 0.7 |
| Palisade St | 27 | 0.6 | 6.7 | 0.1 | 43 | 42 | 0.7 |
| Linden Ave | 28 | 1.4 | 10.1 | 0.1 | 40 | 40 | 1.3 |
| 27 Rd | 32 | 15.1 | 38.6 | 0.3 | 27 | 27 | 15.7 |
| Dorothy Ave | 35 | 5.0 | 17.5 | 0.2 | 31 | 32 | 4.9 |
| EB Off-Ramp | 38 | 0.3 | 5.7 | 0.1 | 43 | 43 | 0.3 |
| EB On-Ramp | 40 | 0.3 | 9.2 | 0.1 | 46 | 46 | 0.3 |
| Frontage Rd | 43 | 1.0 | 17.5 | 0.2 | 41 | 41 | 0.9 |
| US 50 EB #2 | 117 | 0.2 | 4.5 | 0.1 | 43 | 43 | 0.2 |
| Total | | 37.9 | 187.3 | 1.9 | 36 | 36 | 39.7 |

Arterial Level of Service: EB #1

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|-----------------|-------------|-------------|-------------|-------------|
| Grand Mesa Ave | 42 | 1.3 | 42 | 1.3 |
| Gunnison Blvd | 39 | 0.5 | 39 | 0.4 |
| Santa Clara Ave | 39 | 0.9 | 39 | 0.9 |
| Unawweep Ave | 29 | 4.9 | 29 | 4.9 |
| | 35 | 1.3 | 34 | 1.5 |
| | 38 | 0.4 | 37 | 0.6 |
| Green Acre 1 | 40 | 1.0 | 38 | 1.4 |
| Elm Park | 40 | 0.4 | 38 | 0.6 |
| Green Acre 2 | 37 | 0.8 | 36 | 1.0 |
| Aspen St | 41 | 0.4 | 41 | 0.5 |
| Palmer St | 41 | 0.6 | 41 | 0.6 |
| Palisade St | 43 | 0.6 | 43 | 0.6 |
| Linden Ave | 40 | 1.4 | 39 | 1.4 |
| 27 Rd | 28 | 14.5 | 27 | 15.1 |
| Dorothy Ave | 32 | 4.8 | 31 | 5.4 |
| EB Off-Ramp | 43 | 0.3 | 42 | 0.3 |
| EB On-Ramp | 47 | 0.3 | 46 | 0.4 |
| Frontage Rd | 41 | 1.0 | 41 | 1.1 |
| US 50 EB #2 | 43 | 0.2 | 43 | 0.2 |
| Total | 36 | 35.8 | 36 | 38.1 |

Arterial Level of Service
Existing

3/12/2008

Arterial Level of Service: WB #1

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|-----------------|------|---------------|-----------------|-----------|----------------|-------------|-------------|
| Frontage Rd | 43 | 0.3 | 4.4 | 0.1 | 43 | 43 | 0.3 |
| WB On-Ramp | 40 | 0.7 | 15.9 | 0.2 | 45 | 45 | 0.8 |
| EB Off-Ramp | 38 | 0.5 | 10.1 | 0.1 | 42 | 42 | 0.6 |
| Dorothy Ave | 35 | 0.6 | 6.7 | 0.1 | 36 | 36 | 0.6 |
| 27 Rd | 32 | 9.5 | 21.6 | 0.2 | 25 | 26 | 9.3 |
| B 3/4 Road | 28 | 3.5 | 25.6 | 0.3 | 41 | 41 | 3.5 |
| Palisade St | 27 | 0.7 | 10.5 | 0.1 | 37 | 38 | 0.6 |
| Palmer St | 20 | 0.5 | 6.8 | 0.1 | 43 | 43 | 0.4 |
| Aspen St | 24 | 0.4 | 6.1 | 0.1 | 43 | 43 | 0.4 |
| Green Acre 2 | 19 | 0.1 | 3.0 | 0.0 | 48 | 49 | 0.1 |
| Elm Park | 15 | 0.3 | 5.6 | 0.1 | 40 | 40 | 0.3 |
| Green Acre 1 | 107 | 0.1 | 2.5 | 0.0 | 45 | 45 | 0.1 |
| James St | 14 | 0.8 | 8.7 | 0.1 | 40 | 40 | 0.9 |
| | 121 | 1.4 | 4.5 | 0.0 | 32 | 31 | 1.5 |
| UnawEEP Ave | 11 | 12.0 | 16.1 | 0.1 | 13 | 12 | 12.7 |
| Santa Clara Ave | 8 | 3.8 | 13.5 | 0.1 | 32 | 32 | 3.7 |
| Gunnison Blvd | 6 | 0.6 | 6.6 | 0.1 | 45 | 45 | 0.6 |
| Grand Mesa Ave | 1 | 0.5 | 5.1 | 0.0 | 35 | 35 | 0.5 |
| Total | | 36.3 | 173.7 | 1.7 | 36 | 36 | 36.9 |

Arterial Level of Service: WB #1

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|-----------------|-------------|-------------|-------------|-------------|
| Frontage Rd | 43 | 0.3 | 43 | 0.4 |
| WB On-Ramp | 45 | 0.6 | 45 | 0.7 |
| EB Off-Ramp | 42 | 0.5 | 42 | 0.5 |
| Dorothy Ave | 36 | 0.6 | 36 | 0.7 |
| 27 Rd | 25 | 9.9 | 26 | 9.3 |
| B 3/4 Road | 41 | 3.7 | 42 | 3.3 |
| Palisade St | 36 | 0.9 | 37 | 0.7 |
| Palmer St | 42 | 0.5 | 43 | 0.5 |
| Aspen St | 42 | 0.4 | 43 | 0.3 |
| Green Acre 2 | 48 | 0.2 | 49 | 0.1 |
| Elm Park | 40 | 0.2 | 40 | 0.3 |
| Green Acre 1 | 44 | 0.1 | 45 | 0.1 |
| James St | 40 | 0.9 | 40 | 0.8 |
| | 32 | 1.4 | 33 | 1.2 |
| UnawEEP Ave | 13 | 11.4 | 13 | 12.1 |
| Santa Clara Ave | 32 | 3.9 | 32 | 3.7 |
| Gunnison Blvd | 44 | 0.6 | 45 | 0.5 |
| Grand Mesa Ave | 35 | 0.4 | 35 | 0.5 |
| Total | 36 | 36.4 | 36 | 35.6 |

Arterial Level of Service: WB #3

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|--------------|-------------|---------------|-----------------|-----------|----------------|-------------|-------------|
| 29 1/4 Rd | 75 | 0.6 | 11.0 | 0.1 | 48 | 48 | 0.7 |
| | 138 | 0.4 | 9.0 | 0.1 | 44 | 43 | 0.4 |
| Sundance Dr | 71 | 4.7 | 11.3 | 0.1 | 26 | 24 | 5.3 |
| 29 Rd | 68 | 20.7 | 30.0 | 0.1 | 14 | 16 | 16.9 |
| Reta Dr | 66 | 3.7 | 9.4 | 0.1 | 28 | 28 | 3.6 |
| Elm Dr | 64 | 1.1 | 16.0 | 0.2 | 43 | 43 | 1.3 |
| Dee Vee Dr | 62 | 0.1 | 2.0 | 0.0 | 45 | 44 | 0.1 |
| Indiana St | 61 | 0.3 | 4.4 | 0.1 | 46 | 46 | 0.4 |
| Tennessee St | 59 | 0.3 | 5.4 | 0.1 | 52 | 52 | 0.3 |
| 28 1/2 Rd | 51 | 1.0 | 14.5 | 0.2 | 52 | 52 | 0.9 |
| | Fairgrounds | 49 | 2.2 | 42.0 | 0.6 | 52 | 52 |
| 27 3/4 Rd | 127 | 0.3 | 9.0 | 0.1 | 44 | 44 | 0.3 |
| | 46 | 0.4 | 10.6 | 0.1 | 43 | 43 | 0.5 |
| US 50 EB #2 | 130 | 0.3 | 8.6 | 0.1 | 44 | 43 | 0.4 |
| | 117 | 0.4 | 13.3 | 0.2 | 44 | 44 | 0.4 |
| Total | | 36.7 | 196.6 | 2.2 | 40 | 41 | 33.6 |

Arterial Level of Service: WB #3

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|--------------|-------------|-------------|-------------|-------------|
| 29 1/4 Rd | 48 | 0.6 | 48 | 0.6 |
| | 43 | 0.4 | 44 | 0.3 |
| Sundance Dr | 27 | 4.3 | 26 | 4.5 |
| 29 Rd | 13 | 21.8 | 13 | 23.5 |
| Reta Dr | 28 | 3.8 | 28 | 3.6 |
| Elm Dr | 42 | 1.2 | 43 | 0.8 |
| Dee Vee Dr | 44 | 0.1 | 45 | 0.1 |
| Indiana St | 46 | 0.4 | 47 | 0.3 |
| Tennessee St | 51 | 0.4 | 53 | 0.2 |
| 28 1/2 Rd | 51 | 1.2 | 52 | 0.9 |
| Fairgrounds | 52 | 2.2 | 52 | 2.3 |
| | 43 | 0.4 | 44 | 0.3 |
| 27 3/4 Rd | 43 | 0.4 | 43 | 0.4 |
| | 43 | 0.3 | 44 | 0.2 |
| US 50 EB #2 | 43 | 0.4 | 44 | 0.4 |
| Total | 40 | 37.9 | 40 | 38.5 |

Arterial Level of Service: EB #2

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|--------------|------|---------------|-----------------|-----------|----------------|-------------|-------------|
| 27 3/4 Rd | 110 | 1.0 | 22.1 | 0.3 | 43 | 42 | 1.1 |
| Fairgrounds | 109 | 0.8 | 19.7 | 0.2 | 43 | 43 | 0.9 |
| | 136 | 0.2 | 4.7 | 0.1 | 46 | 45 | 0.2 |
| KOA | 112 | 0.9 | 17.4 | 0.2 | 52 | 51 | 0.9 |
| 28 1/2 Rd | 54 | 1.4 | 20.9 | 0.3 | 51 | 51 | 1.4 |
| Rainbow Dr | 113 | 0.6 | 11.0 | 0.2 | 52 | 51 | 0.7 |
| Dee Vee Dr | 115 | 9.3 | 21.6 | 0.2 | 32 | 17 | 28.2 |
| Reta Dr | 56 | 34.5 | 51.6 | 0.2 | 15 | 6 | 119.5 |
| 29 Rd | 116 | 26.6 | 33.0 | 0.1 | 9 | 3 | 89.0 |
| | 133 | 15.7 | 20.3 | 0.1 | 10 | 3 | 59.6 |
| Sundance Dr | 114 | 13.2 | 17.7 | 0.1 | 12 | 4 | 51.2 |
| Redrock Rd | 118 | 0.7 | 9.8 | 0.1 | 41 | 40 | 1.1 |
| 29 1/4 Rd | 119 | 0.5 | 5.7 | 0.1 | 45 | 45 | 0.4 |
| US 50 #3 | 120 | 0.4 | 12.5 | 0.1 | 43 | 43 | 0.3 |
| Total | | 105.9 | 267.8 | 2.2 | 30 | 15 | 354.7 |

Arterial Level of Service: EB #2

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|--------------|-------------|-------------|-------------|-------------|
| 27 3/4 Rd | 43 | 1.0 | 42 | 1.0 |
| Fairgrounds | 44 | 0.7 | 43 | 0.8 |
| | 46 | 0.2 | 46 | 0.2 |
| KOA | 52 | 0.9 | 52 | 0.9 |
| 28 1/2 Rd | 51 | 1.4 | 51 | 1.3 |
| Rainbow Dr | 52 | 0.6 | 52 | 0.5 |
| Dee Vee Dr | 53 | 0.8 | 52 | 0.8 |
| Reta Dr | 43 | 1.0 | 42 | 1.0 |
| 29 Rd | 27 | 4.6 | 25 | 5.2 |
| | 34 | 1.5 | 34 | 1.6 |
| Sundance Dr | 35 | 1.2 | 39 | 0.7 |
| Redrock Rd | 42 | 0.7 | 42 | 0.5 |
| 29 1/4 Rd | 45 | 0.5 | 44 | 0.6 |
| US 50 #3 | 43 | 0.5 | 42 | 0.5 |
| Total | 45 | 15.4 | 44 | 15.6 |

Arterial Level of Service: EB #4

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|---------------|------|---------------|-----------------|-----------|----------------|-------------|-------------|
| 29 1/2 Rd | 78 | 0.5 | 9.4 | 0.1 | 49 | 50 | 0.4 |
| | 131 | 0.2 | 6.6 | 0.1 | 52 | 53 | 0.2 |
| 29 3/4 Rd | 80 | 0.5 | 13.7 | 0.2 | 55 | 56 | 0.4 |
| 30 Rd | 84 | 0.6 | 19.5 | 0.3 | 53 | 53 | 0.6 |
| S Frontage Rd | 85 | 0.8 | 21.8 | 0.3 | 54 | 56 | 0.7 |
| | 124 | 0.9 | 23.4 | 0.3 | 52 | 52 | 0.8 |
| 31 Rd | 87 | 0.4 | 9.3 | 0.1 | 53 | 53 | 0.4 |
| US 50 EB #5 | 134 | 1.4 | 33.2 | 0.5 | 52 | 53 | 1.1 |
| Total | | 5.4 | 136.9 | 2.0 | 53 | 54 | 4.5 |

Arterial Level of Service: EB #4

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|---------------|-------------|-------------|-------------|-------------|
| 29 1/2 Rd | 49 | 0.6 | 50 | 0.5 |
| | 52 | 0.3 | 52 | 0.2 |
| 29 3/4 Rd | 54 | 0.5 | 54 | 0.6 |
| 30 Rd | 53 | 0.7 | 53 | 0.7 |
| S Frontage Rd | 54 | 0.8 | 54 | 0.8 |
| | 52 | 0.9 | 52 | 0.9 |
| 31 Rd | 52 | 0.5 | 53 | 0.5 |
| US 50 EB #5 | 52 | 1.6 | 52 | 1.6 |
| Total | 52 | 5.8 | 52 | 5.7 |

Arterial Level of Service: WB #4

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|---------------|------|---------------|-----------------|------------|----------------|-------------|-------------|
| 31 Rd | 87 | 1.2 | 32.5 | 0.5 | 53 | 53 | 1.3 |
| | 124 | 0.4 | 9.4 | 0.1 | 52 | 52 | 0.3 |
| S Frontage Rd | 85 | 0.7 | 22.6 | 0.3 | 54 | 54 | 0.7 |
| 30 Rd | 84 | 0.7 | 22.2 | 0.3 | 53 | 53 | 0.8 |
| 29 3/4 Rd | 80 | 0.7 | 19.5 | 0.3 | 53 | 53 | 0.7 |
| | 131 | 0.6 | 14.3 | 0.2 | 52 | 52 | 0.6 |
| 29 1/2 Rd | 78 | 0.8 | 7.0 | 0.1 | 49 | 49 | 0.8 |
| US 50 #3 | 120 | 0.3 | 10.4 | 0.1 | 44 | 44 | 0.3 |
| Total | | 5.4 | 137.9 | 2.0 | 52 | 52 | 5.5 |

Arterial Level of Service: WB #4

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|---------------|-------------|-------------|-------------|-------------|
| 31 Rd | 53 | 1.2 | 53 | 1.1 |
| | 52 | 0.4 | 52 | 0.4 |
| S Frontage Rd | 54 | 0.7 | 54 | 0.7 |
| 30 Rd | 53 | 0.7 | 54 | 0.7 |
| 29 3/4 Rd | 52 | 0.8 | 53 | 0.6 |
| | 52 | 0.6 | 52 | 0.5 |
| 29 1/2 Rd | 49 | 0.8 | 49 | 0.7 |
| US 50 #3 | 45 | 0.3 | 45 | 0.3 |
| Total | 52 | 5.6 | 52 | 5.1 |

Arterial Level of Service: WB #6

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|--------------|------|---------------|-----------------|------------|----------------|-------------|-------------|
| 141B | 90 | 9.6 | 18.0 | 0.1 | 25 | 27 | 8.7 |
| US 50 EB #5 | 134 | 3.0 | 12.9 | 0.1 | 42 | 41 | 3.0 |
| Total | | 12.6 | 30.9 | 0.3 | 32 | 33 | 11.7 |

Arterial Level of Service: WB #6

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|--------------|-------------|-------------|-------------|-------------|
| 141B | 26 | 9.5 | 24 | 10.6 |
| US 50 EB #5 | 42 | 2.9 | 41 | 3.1 |
| Total | 32 | 12.4 | 31 | 13.7 |

Arterial Level of Service: EB #7

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|----------------|------|---------------|-----------------|-----------|----------------|-------------|-------------|
| | 111 | 0.0 | 0.0 | 0.1 | | 0.3 | 0.3 |
| CDOT | 92 | 0.3 | 6.6 | 0.1 | 53 | 53 | 0.3 |
| | 122 | 1.3 | 32.3 | 0.5 | 52 | 53 | 1.2 |
| | 141 | 1.7 | 36.0 | 0.5 | 52 | 52 | 1.7 |
| Willow Bend Rd | 94 | 0.9 | 11.6 | 0.2 | 51 | 51 | 0.9 |
| | 132 | 0.5 | 12.6 | 0.2 | 43 | 43 | 0.4 |
| 3247 | 97 | 1.8 | 36.7 | 0.5 | 51 | 51 | 1.7 |
| 1st St | 100 | 0.4 | 5.2 | 0.1 | 57 | 57 | 0.4 |
| 3rd St | 102 | 1.1 | 19.2 | 0.3 | 51 | 51 | 1.0 |
| SH 141A | 104 | 1.0 | 12.3 | 0.2 | 50 | 51 | 0.9 |
| | 72 | 0.4 | 10.4 | 0.1 | 42 | 43 | 0.3 |
| Total | | 9.4 | 183.0 | 2.7 | 53 | 51 | 9.1 |

Arterial Level of Service: EB #7

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|----------------|-------------|-------------|-------------|-------------|
| | 0.0 | | | |
| CDOT | 53 | 0.3 | 53 | 0.3 |
| | 52 | 1.5 | 52 | 1.4 |
| | 52 | 1.9 | 52 | 1.6 |
| Willow Bend Rd | 51 | 1.0 | 51 | 0.9 |
| | 43 | 0.5 | 43 | 0.5 |
| 3247 | 51 | 1.9 | 51 | 1.8 |
| 1st St | 57 | 0.4 | 57 | 0.3 |
| 3rd St | 50 | 1.2 | 51 | 1.2 |
| SH 141A | 50 | 1.1 | 50 | 1.0 |
| | 42 | 0.4 | 42 | 0.4 |
| Total | 50 | 10.4 | 53 | 9.3 |

Arterial Level of Service: WB #7

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|----------------|------|---------------|-----------------|-----------|----------------|-------------|-------------|
| | 72 | 0.3 | 5.6 | 0.1 | 45 | 45 | 0.3 |
| SH 141A | 104 | 0.1 | 8.9 | 0.1 | 50 | 50 | 0.1 |
| 3rd St | 102 | 0.5 | 11.7 | 0.2 | 53 | 53 | 0.5 |
| 1st St | 100 | 0.4 | 18.2 | 0.3 | 53 | 54 | 0.3 |
| 3247 | 97 | 0.3 | 5.5 | 0.1 | 54 | 54 | 0.3 |
| | 132 | 0.6 | 42.7 | 0.5 | 44 | 44 | 0.5 |
| Willow Bend Rd | 94 | 0.3 | 10.9 | 0.2 | 50 | 50 | 0.3 |
| | 141 | 0.3 | 11.1 | 0.2 | 53 | 53 | 0.3 |
| | 122 | 0.9 | 35.4 | 0.5 | 53 | 53 | 0.9 |
| CDOT | 92 | 0.5 | 29.8 | 0.5 | 57 | 56 | 0.5 |
| | 111 | 0.1 | 6.6 | 0.1 | 52 | 53 | 0.1 |
| US 50 EB #5 | 125 | 0.3 | 8.3 | 0.1 | 53 | 54 | 0.3 |
| Total | | 4.6 | 194.5 | 2.8 | 51 | 51 | 4.4 |

Arterial Level of Service: WB #7

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|----------------|-------------|-------------|-------------|-------------|
| | 45 | 0.3 | 45 | 0.3 |
| SH 141A | 50 | 0.1 | 50 | 0.2 |
| 3rd St | 53 | 0.5 | 53 | 0.5 |
| 1st St | 53 | 0.4 | 53 | 0.4 |
| 3247 | 54 | 0.3 | 54 | 0.4 |
| | 44 | 0.5 | 44 | 0.7 |
| Willow Bend Rd | 50 | 0.2 | 50 | 0.3 |
| | 53 | 0.2 | 53 | 0.3 |
| | 53 | 0.9 | 53 | 1.0 |
| CDOT | 57 | 0.5 | 57 | 0.6 |
| | 52 | 0.1 | 52 | 0.2 |
| US 50 EB #5 | 53 | 0.3 | 53 | 0.4 |
| Total | 51 | 4.3 | 51 | 5.1 |

Arterial Level of Service: EB #5

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed | Run 1 Speed | Run 1 Delay |
|--------------|------|---------------|-----------------|-----------|----------------|-------------|-------------|
| | 139 | 0.3 | 4.4 | 0.1 | 45 | 45 | 0.3 |
| | 140 | 1.0 | 10.0 | 0.1 | 50 | 50 | 1.0 |
| US 50 #7 | 125 | 0.6 | 6.8 | 0.1 | 44 | 44 | 0.6 |
| Total | | 1.8 | 21.2 | 0.3 | 47 | 47 | 1.8 |

Arterial Level of Service: EB #5

| Cross Street | Run 2 Speed | Run 2 Delay | Run 3 Speed | Run 3 Delay |
|--------------|-------------|-------------|-------------|-------------|
| | 45 | 0.3 | 45 | 0.3 |
| | 50 | 1.1 | 50 | 0.9 |
| US 50 #7 | 44 | 0.6 | 44 | 0.6 |
| Total | 47 | 2.0 | 47 | 1.8 |