Scenario Report

| | |
|---|---|
| Scenario: | PM |
| Command: | Default Command |
| Volume: | PM |
| Geometry: | Default Geometry |
| Impact Fee: | Default Impact Fee |
| Trip Generation: | Default Trip Generation |
| Trip Distribution: | Default Trip Distribution |
| Paths: | Default Path |
| Routes: | Default Route |
| Configuration: | Default Configuration |





Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Miller Cr/Marinwood | B | 10.7 | 0.412 | B | 10.7 | 0.412 | + 0.000 V/C |
| # 2 Miller Cr/Las Gallinas | A | 9.5 | 0.320 | A | 9.5 | 0.320 | + 0.000 V/C |
| # 3 Miller Cr/Elvia Ct | A | 8.3 | 0.222 | A | 8.3 | 0.222 | + 0.000 V/C |
| # 4 Las Gallinas/Lucas Valley | C | 22.5 | 0.320 | C | 22.5 | 0.320 | + 0.000 D/V |
| # 5 Miller Cr/Marinwood A1 | B | 10.7 | 0.412 | B | 10.7 | 0.412 | + 0.000 V/C |
| # 6 Miller Cr/Las Gallinas A1 | B | 10.6 | 0.438 | B | 10.6 | 0.438 | + 0.000 V/C |
| # 7 Miller Cr/Elvia Ct A1 | A | 8.1 | 0.217 | A | 8.1 | 0.217 | + 0.000 V/C |
| # 9 Miller Cr/Marinwood A2 | B | 12.1 | 0.598 | B | 12.1 | 0.598 | + 0.000 V/C |
| # 10 Miller Cr/Las Gallinas A2 | A | 9.2 | 0.276 | A | 9.2 | 0.276 | + 0.000 V/C |
| # 11 Miller Cr/Elvia Ct A2 | A | 8.3 | 0.222 | A | 8.3 | 0.222 | + 0.000 V/C |
| # 12 Las Gallinas/Lucas Valley A2 | C | 22.5 | 0.320 | C | 22.5 | 0.320 | + 0.000 D/V |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 1. Miller Cr/Marinwood

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.412 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 10.7 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 1 0 | 0 | 1 | 0 | 1 0 | 0 | 1 | 0 | 1 0 | 0 | 1 | 1 | 0 1 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.71 | 0.29 | 1.00 | | 0.90 | 0.10 | 1.00 | | 0.05 | 0.95 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Sat.: | 356 | 143 | 585 | | 448 | 51 | 591 | | 27 | 564 | 664 | | 559 | 609 | 689 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.11 | 0.09 | | 0.23 | 0.23 | 0.01 | | 0.30 | 0.30 | 0.03 | | 0.15 | 0.41 | 0.24 | |
| Crit Moves: | **** | | | | **** | | | | **** | | | | **** | | | |
| Delay/Veh: | 10.2 | 10.2 | 8.9 | | 11.4 | 11.4 | 8.4 | | 10.9 | 10.9 | 8.0 | | 10.1 | 12.3 | 9.3 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 10.2 | 10.2 | 8.9 | | 11.4 | 11.4 | 8.4 | | 10.9 | 10.9 | 8.0 | | 10.1 | 12.3 | 9.3 | |
| LOS by Move: | B | B | A | | B | B | A | | B | B | A | | B | B | A | |
| ApproachDel: | 9.6 | | | | 11.2 | | | | 10.6 | | | | 10.9 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 9.6 | | | | 11.2 | | | | 10.6 | | | | 10.9 | | | |
| LOS by Appr: | A | | | | B | | | | B | | | | B | | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | | 0.3 | 0.3 | 0.0 | | 0.4 | 0.4 | 0.0 | | 0.2 | 0.6 | 0.3 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 2. Miller Cr/Las Gallinas

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.320 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 9.5 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 | 0 | 1 0 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 0.50 | 0.50 | 1.00 | |
| Final Sat.: | 534 | 578 | 650 | | 533 | 574 | 645 | | 533 | 577 | 647 | | 312 | 309 | 742 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.10 | 0.12 | | 0.12 | 0.08 | 0.03 | | 0.03 | 0.11 | 0.02 | | 0.32 | 0.32 | 0.13 | |
| Crit Moves: | | | **** | | **** | | | | | **** | | | **** | | | |
| Delay/Veh: | 9.2 | 9.2 | 8.5 | | 9.9 | 9.1 | 8.0 | | 9.3 | 9.3 | 8.0 | | 10.8 | 10.8 | 8.0 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 9.2 | 9.2 | 8.5 | | 9.9 | 9.1 | 8.0 | | 9.3 | 9.3 | 8.0 | | 10.8 | 10.8 | 8.0 | |
| LOS by Move: | A | A | A | | A | A | A | | A | A | A | | B | B | A | |
| ApproachDel: | 8.9 | | | | 9.4 | | | | 9.1 | | | | 9.9 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 8.9 | | | | 9.4 | | | | 9.1 | | | | 9.9 | | | |
| LOS by Appr: | A | | | | A | | | | A | | | | A | | | |
| AllWayAvgQ: | 0.0 | 0.1 | 0.1 | | 0.1 | 0.1 | 0.0 | | 0.0 | 0.1 | 0.0 | | 0.4 | 0.4 | 0.1 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 3. Miller Cr/Elvia Ct

Cycle (sec): 100 Critical Vol./Cap.(X): 0.222
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 0 Level Of Service: A

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 1! | 0 | 0 | 1 | 0 | 0 1 | 0 | 0 | 0 1! | 0 | 0 | 0 | 0 1! | 0 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.13 | 0.81 | 0.06 | | 1.00 | 0.91 | 0.09 | | 0.22 | 0.03 | 0.75 | | 0.85 | 0.00 | 0.15 | |
| Final Sat.: | 103 | 665 | 49 | | 668 | 681 | 65 | | 181 | 23 | 599 | | 600 | 0 | 109 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.22 | 0.22 | 0.22 | | 0.01 | 0.17 | 0.17 | | 0.09 | 0.09 | 0.09 | | 0.02 | xxxx | 0.02 | |
| Crit Moves: | **** | | | | | | **** | | | **** | | | **** | | | |
| Delay/Veh: | 8.5 | 8.5 | 8.5 | | 8.1 | 8.4 | 8.4 | | 7.6 | 7.6 | 7.6 | | 7.8 | 0.0 | 7.8 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 8.5 | 8.5 | 8.5 | | 8.1 | 8.4 | 8.4 | | 7.6 | 7.6 | 7.6 | | 7.8 | 0.0 | 7.8 | |
| LOS by Move: | A | A | A | | A | A | A | | A | A | A | | A | * | A | |
| ApproachDel: | 8.5 | | | | 8.4 | | | | 7.6 | | | | 7.8 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 8.5 | | | | 8.4 | | | | 7.6 | | | | 7.8 | | | |
| LOS by Appr: | A | | | | A | | | | A | | | | A | | | |
| AllWayAvgQ: | 0.3 | 0.3 | 0.3 | | 0.0 | 0.2 | 0.2 | | 0.1 | 0.1 | 0.1 | | 0.0 | 0.0 | 0.0 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Las Gallinas/Lucas Valley Rd

Cycle (sec): 90 Critical Vol./Cap.(X): 0.320
Loss Time (sec): 4 (Y+R=2.0 sec) Average Delay (sec/veh): 22.5
Optimal Cycle: 20 Level Of Service: C

| Approach: | North Bound | | | | | South Bound | | | | | East Bound | | | | | West Bound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | | L | - T | - R | | | L | - T | - R | | | L | - T | - R | | |
| Control: | Protected | | | | | Protected | | | | | Protected | | | | | Protected | | | | |
| Rights: | Ignore | | | | | Ignore | | | | | Ignore | | | | | Ignore | | | | |
| Min. Green: | 8 | 0 | 0 | | | 8 | 0 | 0 | | | 8 | 0 | 0 | | | 8 | 0 | 0 | | |
| Lanes: | 1 | 0 1 | 0 | 1 | | 1 | 0 1 | 0 | 1 | | 1 | 0 1 | 0 | 1 | | 1 | 0 1 | 0 | 1 | |
| Volume Module: | | | | | | | | | | | | | | | | | | | | |
| Base Vol: | 141 | 109 | 92 | | | 59 | 99 | 34 | | | 22 | 321 | 81 | | | 96 | 364 | 72 | | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | |
| Initial Bse: | 141 | 109 | 92 | | | 59 | 99 | 34 | | | 22 | 321 | 81 | | | 96 | 364 | 72 | | |
| User Adj: | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | |
| PHF Adj: | 0.96 | 0.96 | 0.00 | | | 0.96 | 0.96 | 0.00 | | | 0.96 | 0.96 | 0.00 | | | 0.96 | 0.96 | 0.00 | | |
| PHF Volume: | 147 | 114 | 0 | | | 61 | 103 | 0 | | | 23 | 334 | 0 | | | 100 | 379 | 0 | | |
| Reduct Vol: | 0 | 0 | 0 | | | 0 | 0 | 0 | | | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| Reduced Vol: | 147 | 114 | 0 | | | 61 | 103 | 0 | | | 23 | 334 | 0 | | | 100 | 379 | 0 | | |
| PCE Adj: | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | |
| MLF Adj: | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | |
| FinalVolume: | 147 | 114 | 0 | | | 61 | 103 | 0 | | | 23 | 334 | 0 | | | 100 | 379 | 0 | | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | | | 1900 | 1900 | 1900 | | | 1900 | 1900 | 1900 | | | 1900 | 1900 | 1900 | | |
| Adjustment: | 0.95 | 1.00 | 1.00 | | | 0.95 | 1.00 | 1.00 | | | 0.95 | 1.00 | 1.00 | | | 0.95 | 1.00 | 1.00 | | |
| Lanes: | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | |
| Final Sat.: | 1805 | 1900 | 1900 | | | 1805 | 1900 | 1900 | | | 1805 | 1900 | 1900 | | | 1805 | 1900 | 1900 | | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.06 | 0.00 | | | 0.03 | 0.05 | 0.00 | | | 0.01 | 0.18 | 0.00 | | | 0.06 | 0.20 | 0.00 | | |
| Crit Moves: | | **** | | | | | **** | | | | | **** | | | | | | **** | | |
| Green/Cycle: | 0.17 | 0.18 | 0.00 | | | 0.10 | 0.11 | 0.00 | | | 0.09 | 0.45 | 0.00 | | | 0.23 | 0.59 | 0.00 | | |
| Volume/Cap: | 0.47 | 0.34 | 0.00 | | | 0.34 | 0.52 | 0.00 | | | 0.14 | 0.39 | 0.00 | | | 0.24 | 0.34 | 0.00 | | |
| Uniform Del: | 33.6 | 32.5 | 0.0 | | | 37.7 | 38.1 | 0.0 | | | 37.8 | 16.5 | 0.0 | | | 28.4 | 9.5 | 0.0 | | |
| IncremntDel: | 1.1 | 0.6 | 0.0 | | | 1.1 | 2.4 | 0.0 | | | 0.4 | 0.3 | 0.0 | | | 0.3 | 0.2 | 0.0 | | |
| InitQueuDel: | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | | |
| Delay Adj: | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | | 1.00 | 1.00 | 0.00 | | |
| Delay/Veh: | 34.7 | 33.1 | 0.0 | | | 38.8 | 40.5 | 0.0 | | | 38.2 | 16.8 | 0.0 | | | 28.7 | 9.7 | 0.0 | | |
| User DelAdj: | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | |
| AdjDel/Veh: | 34.7 | 33.1 | 0.0 | | | 38.8 | 40.5 | 0.0 | | | 38.2 | 16.8 | 0.0 | | | 28.7 | 9.7 | 0.0 | | |
| LOS by Move: | C | C | A | | | D | D | A | | | D | B | A | | | C | A | A | | |
| HCM2kAvgQ: | 4 | 3 | 0 | | | 2 | 3 | 0 | | | 1 | 6 | 0 | | | 2 | 5 | 0 | | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 5. Miller Cr/Marinwood Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.412 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 10.7 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 1 0 | 0 | 1 | 0 | 1 0 | 0 | 1 | 0 | 1 0 | 0 | 1 | 1 | 0 1 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.71 | 0.29 | 1.00 | | 0.90 | 0.10 | 1.00 | | 0.05 | 0.95 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Sat.: | 356 | 143 | 585 | | 448 | 51 | 591 | | 27 | 564 | 664 | | 559 | 609 | 689 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.11 | 0.09 | | 0.23 | 0.23 | 0.01 | | 0.30 | 0.30 | 0.03 | | 0.15 | 0.41 | 0.24 | |
| Crit Moves: | | **** | | | | **** | | | | **** | | | | **** | | |
| Delay/Veh: | 10.2 | 10.2 | 8.9 | | 11.4 | 11.4 | 8.4 | | 10.9 | 10.9 | 8.0 | | 10.1 | 12.3 | 9.3 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 10.2 | 10.2 | 8.9 | | 11.4 | 11.4 | 8.4 | | 10.9 | 10.9 | 8.0 | | 10.1 | 12.3 | 9.3 | |
| LOS by Move: | B | B | A | | B | B | A | | B | B | A | | B | B | A | |
| ApproachDel: | 9.6 | | | | 11.2 | | | | 10.6 | | | | 10.9 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 9.6 | | | | 11.2 | | | | 10.6 | | | | 10.9 | | | |
| LOS by Appr: | A | | | | B | | | | B | | | | B | | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | | 0.3 | 0.3 | 0.0 | | 0.4 | 0.4 | 0.0 | | 0.2 | 0.6 | 0.3 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 6. Miller Cr/Las Gallinas Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.438 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 10.6 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 1! | 0 | 0 | 1 | 0 0 | 1 | 0 | 1 | 0 0 | 1 | 0 | 0 | 0 1! | 0 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.05 | 0.41 | 0.54 | | 1.00 | 0.73 | 0.27 | | 1.00 | 0.85 | 0.15 | | 0.34 | 0.34 | 0.32 | |
| Final Sat.: | 34 | 258 | 339 | | 551 | 450 | 166 | | 566 | 533 | 93 | | 228 | 226 | 212 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.23 | 0.23 | 0.23 | | 0.12 | 0.10 | 0.10 | | 0.03 | 0.12 | 0.12 | | 0.44 | 0.44 | 0.44 | |
| Crit Moves: | **** | | | | **** | | | | | **** | | | **** | | | |
| Delay/Veh: | 9.9 | 9.9 | 9.9 | | 9.6 | 8.8 | 8.8 | | 8.9 | 8.8 | 8.8 | | 12.1 | 12.1 | 12.1 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 9.9 | 9.9 | 9.9 | | 9.6 | 8.8 | 8.8 | | 8.9 | 8.8 | 8.8 | | 12.1 | 12.1 | 12.1 | |
| LOS by Move: | A | A | A | | A | A | A | | A | A | A | | B | B | B | |
| ApproachDel: | 9.9 | | | | 9.2 | | | | 8.9 | | | | 12.1 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 9.9 | | | | 9.2 | | | | 8.9 | | | | 12.1 | | | |
| LOS by Appr: | A | | | | A | | | | A | | | | B | | | |
| AllWayAvgQ: | 0.3 | 0.3 | 0.3 | | 0.1 | 0.1 | 0.1 | | 0.0 | 0.1 | 0.1 | | 0.7 | 0.7 | 0.7 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 7. Miller Cr/Elvia Ct Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.217 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 8.1 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 1! | 0 | 0 | 0 | 0 1! | 0 | 0 | 0 | 0 1! | 0 | 0 | 0 | 0 1! | 0 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.13 | 0.81 | 0.06 | | 0.06 | 0.86 | 0.08 | | 0.22 | 0.03 | 0.75 | | 0.85 | 0.00 | 0.15 | |
| Final Sat.: | 106 | 683 | 51 | | 49 | 716 | 68 | | 182 | 23 | 603 | | 605 | 0 | 110 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.22 | 0.22 | 0.22 | | 0.16 | 0.16 | 0.16 | | 0.09 | 0.09 | 0.09 | | 0.02 | xxxx | 0.02 | |
| Crit Moves: | **** | | | | | **** | | | | **** | | | | **** | | |
| Delay/Veh: | 8.3 | 8.3 | 8.3 | | 8.0 | 8.0 | 8.0 | | 7.5 | 7.5 | 7.5 | | 7.8 | 0.0 | 7.8 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 8.3 | 8.3 | 8.3 | | 8.0 | 8.0 | 8.0 | | 7.5 | 7.5 | 7.5 | | 7.8 | 0.0 | 7.8 | |
| LOS by Move: | A | A | A | | A | A | A | | A | A | A | | A | * | A | |
| ApproachDel: | 8.3 | | | | 8.0 | | | | 7.5 | | | | 7.8 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 8.3 | | | | 8.0 | | | | 7.5 | | | | 7.8 | | | |
| LOS by Appr: | A | | | | A | | | | A | | | | A | | | |
| AllWayAvgQ: | 0.3 | 0.3 | 0.3 | | 0.2 | 0.2 | 0.2 | | 0.1 | 0.1 | 0.1 | | 0.0 | 0.0 | 0.0 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 9. Miller Cr/Marinwood Alt 2

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.598 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 12.1 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 1! | 0 | 0 | 0 | 0 1! | 0 | 0 | 0 | 0 1! | 0 | 0 | 1 | 0 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 40 | 16 | 52 | | 105 | 12 | 7 | | 8 | 169 | 20 | | 86 | 251 | 165 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.37 | 0.15 | 0.48 | | 0.85 | 0.10 | 0.05 | | 0.04 | 0.86 | 0.10 | | 1.00 | 0.60 | 0.40 | |
| Final Sat.: | 219 | 88 | 285 | | 480 | 55 | 32 | | 27 | 568 | 67 | | 605 | 420 | 276 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.18 | 0.18 | 0.18 | | 0.22 | 0.22 | 0.22 | | 0.30 | 0.30 | 0.30 | | 0.14 | 0.60 | 0.60 | |
| Crit Moves: | **** | | | | | | **** | | | | **** | | | | **** | |
| Delay/Veh: | 9.6 | 9.6 | 9.6 | | 10.3 | 10.3 | 10.3 | | 10.3 | 10.3 | 10.3 | | 9.5 | 14.7 | 14.7 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 9.6 | 9.6 | 9.6 | | 10.3 | 10.3 | 10.3 | | 10.3 | 10.3 | 10.3 | | 9.5 | 14.7 | 14.7 | |
| LOS by Move: | A | A | A | | B | B | B | | B | B | B | | A | B | B | |
| ApproachDel: | 9.6 | | | | 10.3 | | | | 10.3 | | | | 13.8 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 9.6 | | | | 10.3 | | | | 10.3 | | | | 13.8 | | | |
| LOS by Appr: | A | | | | B | | | | B | | | | B | | | |
| AllWayAvgQ: | 0.2 | 0.2 | 0.2 | | 0.2 | 0.2 | 0.2 | | 0.4 | 0.4 | 0.4 | | 0.2 | 1.3 | 1.3 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #10 10. Miller Cr/Las Gallinas Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.276 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 9.2 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 1 | 0 | 1 | 1 0 | 1 | 0 | 0 | 1 0 | 1 | 0 | 0 | 1 0 | 1 | 0 | 0 | 1 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 8 | 60 | 79 | | 64 | 46 | 17 | | 16 | 63 | 11 | | 100 | 99 | 93 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 1.00 | 1.00 | | 1.00 | 0.73 | 0.27 | | 1.00 | 0.85 | 0.15 | | 1.00 | 0.52 | 0.48 | |
| Final Sat.: | 538 | 583 | 658 | | 558 | 456 | 168 | | 568 | 536 | 94 | | 598 | 359 | 337 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.10 | 0.12 | | 0.11 | 0.10 | 0.10 | | 0.03 | 0.12 | 0.12 | | 0.17 | 0.28 | 0.28 | |
| Crit Moves: | | | **** | | **** | | | | | **** | | | | **** | | |
| Delay/Veh: | 9.1 | 9.2 | 8.5 | | 9.6 | 8.7 | 8.7 | | 8.9 | 8.8 | 8.8 | | 9.7 | 9.5 | 9.5 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 9.1 | 9.2 | 8.5 | | 9.6 | 8.7 | 8.7 | | 8.9 | 8.8 | 8.8 | | 9.7 | 9.5 | 9.5 | |
| LOS by Move: | A | A | A | | A | A | A | | A | A | A | | A | A | A | |
| ApproachDel: | 8.8 | | | | 9.1 | | | | 8.8 | | | | 9.5 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 8.8 | | | | 9.1 | | | | 8.8 | | | | 9.5 | | | |
| LOS by Appr: | A | | | | A | | | | A | | | | A | | | |
| AllWayAvgQ: | 0.0 | 0.1 | 0.1 | | 0.1 | 0.1 | 0.1 | | 0.0 | 0.1 | 0.1 | | 0.2 | 0.3 | 0.3 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #11 11. Miller Cr/Elvia Ct Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.222 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 8.3 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 | 1! | 0 0 | 1 | 0 | 0 | 1 0 | 0 | 0 | 1! | 0 0 | 0 | 0 | 1! | 0 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 23 | 148 | 11 | | 8 | 116 | 11 | | 16 | 2 | 53 | | 11 | 0 | 2 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.13 | 0.81 | 0.06 | | 1.00 | 0.91 | 0.09 | | 0.22 | 0.03 | 0.75 | | 0.85 | 0.00 | 0.15 | |
| Final Sat.: | 103 | 665 | 49 | | 668 | 681 | 65 | | 181 | 23 | 599 | | 600 | 0 | 109 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.22 | 0.22 | 0.22 | | 0.01 | 0.17 | 0.17 | | 0.09 | 0.09 | 0.09 | | 0.02 | xxxx | 0.02 | |
| Crit Moves: | **** | | | | | | **** | | | **** | | | **** | | | |
| Delay/Veh: | 8.5 | 8.5 | 8.5 | | 8.1 | 8.4 | 8.4 | | 7.6 | 7.6 | 7.6 | | 7.8 | 0.0 | 7.8 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 8.5 | 8.5 | 8.5 | | 8.1 | 8.4 | 8.4 | | 7.6 | 7.6 | 7.6 | | 7.8 | 0.0 | 7.8 | |
| LOS by Move: | A | A | A | | A | A | A | | A | A | A | | A | * | A | |
| ApproachDel: | 8.5 | | | | 8.4 | | | | 7.6 | | | | 7.8 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 8.5 | | | | 8.4 | | | | 7.6 | | | | 7.8 | | | |
| LOS by Appr: | A | | | | A | | | | A | | | | A | | | |
| AllWayAvgQ: | 0.3 | 0.3 | 0.3 | | 0.0 | 0.2 | 0.2 | | 0.1 | 0.1 | 0.1 | | 0.0 | 0.0 | 0.0 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 Las Gallinas/Lucas Valley Rd Alt 2

| | | | |
|---|---|---|---|
| Cycle (sec): | 90 | Critical Vol./Cap.(X): | 0.320 |
| Loss Time (sec): | 4 (Y+R=2.0 sec) | Average Delay (sec/veh): | 22.5 |
| Optimal Cycle: | 20 | Level Of Service: | C |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Protected | | | | Protected | | | | Protected | | | | Protected | | | |
| Rights: | Ignore | | | | Ignore | | | | Ignore | | | | Ignore | | | |
| Min. Green: | 8 | 0 | 0 | | 8 | 0 | 0 | | 8 | 0 | 0 | | 8 | 0 | 0 | |
| Lanes: | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 141 | 109 | 92 | | 59 | 99 | 34 | | 22 | 321 | 81 | | 96 | 364 | 72 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 141 | 109 | 92 | | 59 | 99 | 34 | | 22 | 321 | 81 | | 96 | 364 | 72 | |
| User Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| PHF Adj: | 0.96 | 0.96 | 0.00 | | 0.96 | 0.96 | 0.00 | | 0.96 | 0.96 | 0.00 | | 0.96 | 0.96 | 0.00 | |
| PHF Volume: | 147 | 114 | 0 | | 61 | 103 | 0 | | 23 | 334 | 0 | | 100 | 379 | 0 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 147 | 114 | 0 | | 61 | 103 | 0 | | 23 | 334 | 0 | | 100 | 379 | 0 | |
| PCE Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| MLF Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| FinalVolume: | 147 | 114 | 0 | | 61 | 103 | 0 | | 23 | 334 | 0 | | 100 | 379 | 0 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | |
| Adjustment: | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Sat.: | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.06 | 0.00 | | 0.03 | 0.05 | 0.00 | | 0.01 | 0.18 | 0.00 | | 0.06 | 0.20 | 0.00 | |
| Crit Moves: | | **** | | | **** | | | | **** | | | | | **** | | |
| Green/Cycle: | 0.17 | 0.18 | 0.00 | | 0.10 | 0.11 | 0.00 | | 0.09 | 0.45 | 0.00 | | 0.23 | 0.59 | 0.00 | |
| Volume/Cap: | 0.47 | 0.34 | 0.00 | | 0.34 | 0.52 | 0.00 | | 0.14 | 0.39 | 0.00 | | 0.24 | 0.34 | 0.00 | |
| Uniform Del: | 33.6 | 32.5 | 0.0 | | 37.7 | 38.1 | 0.0 | | 37.8 | 16.5 | 0.0 | | 28.4 | 9.5 | 0.0 | |
| IncremntDel: | 1.1 | 0.6 | 0.0 | | 1.1 | 2.4 | 0.0 | | 0.4 | 0.3 | 0.0 | | 0.3 | 0.2 | 0.0 | |
| InitQueuDel: | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| Delay Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| Delay/Veh: | 34.7 | 33.1 | 0.0 | | 38.8 | 40.5 | 0.0 | | 38.2 | 16.8 | 0.0 | | 28.7 | 9.7 | 0.0 | |
| User DelAdj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 34.7 | 33.1 | 0.0 | | 38.8 | 40.5 | 0.0 | | 38.2 | 16.8 | 0.0 | | 28.7 | 9.7 | 0.0 | |
| LOS by Move: | C | C | A | | D | D | A | | D | B | A | | C | A | A | |
| HCM2kAvgQ: | 4 | 3 | 0 | | 2 | 3 | 0 | | 1 | 6 | 0 | | 2 | 5 | 0 | |

Note: Queue reported is the number of cars per lane.

Scenario Report

| | |
|---|---|
| Scenario: | AM |
| Command: | Default Command |
| Volume: | AM |
| Geometry: | Default Geometry |
| Impact Fee: | Default Impact Fee |
| Trip Generation: | Default Trip Generation |
| Trip Distribution: | Default Trip Distribution |
| Paths: | Default Path |
| Routes: | Default Route |
| Configuration: | Default Configuration |





Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Miller Cr/Marinwood | B | 14.6 | 0.670 | B | 14.6 | 0.670 | + 0.000 V/C |
| # 2 Miller Cr/Las Gallinas | C | 15.4 | 0.706 | C | 15.4 | 0.706 | + 0.000 V/C |
| # 3 Miller Cr/Elvia Ct | C | 15.3 | 0.699 | C | 15.3 | 0.699 | + 0.000 V/C |
| # 4 Las Gallinas/Lucas Valley | C | 28.2 | 0.613 | C | 28.2 | 0.613 | + 0.000 D/V |
| # 5 Miller Cr/Marinwood A1 | B | 14.6 | 0.670 | B | 14.6 | 0.670 | + 0.000 V/C |
| # 6 Miller Cr/Las Gallinas A1 | C | 16.8 | 0.734 | C | 16.8 | 0.734 | + 0.000 V/C |
| # 7 Miller Cr/Elvia Ct A1 | B | 13.6 | 0.645 | B | 13.6 | 0.645 | + 0.000 V/C |
| # 9 Miller Cr/Marinwood A2 | C | 18.6 | 0.812 | C | 18.6 | 0.812 | + 0.000 V/C |
| # 10 Miller Cr/Las Gallinas A2 | B | 12.4 | 0.533 | B | 12.4 | 0.533 | + 0.000 V/C |
| # 11 Miller Cr/Elvia Ct A2 | C | 15.3 | 0.699 | C | 15.3 | 0.699 | + 0.000 V/C |
| # 12 Las Gallinas/Lucas Valley A2 | C | 28.2 | 0.613 | C | 28.2 | 0.613 | + 0.000 D/V |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 1. Miller Cr/Marinwood

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.670 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 14.6 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 1 | 0 | 0 1 | 0 | 1 | 0 | 0 1 | 0 | 1 | 0 | 0 1 | 1 | 0 | 1 | 0 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.62 | 0.38 | 1.00 | | 0.90 | 0.10 | 1.00 | | 0.04 | 0.96 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Sat.: | 285 | 171 | 524 | | 426 | 46 | 550 | | 20 | 523 | 601 | | 522 | 570 | 633 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.09 | 0.09 | 0.14 | | 0.39 | 0.39 | 0.02 | | 0.40 | 0.40 | 0.03 | | 0.15 | 0.67 | 0.22 | |
| Crit Moves: | | | **** | | **** | | | | | **** | | | | **** | | |
| Delay/Veh: | 10.6 | 10.6 | 9.9 | | 14.1 | 14.1 | 8.9 | | 12.9 | 12.9 | 8.5 | | 10.6 | 20.1 | 9.7 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 10.6 | 10.6 | 9.9 | | 14.1 | 14.1 | 8.9 | | 12.9 | 12.9 | 8.5 | | 10.6 | 20.1 | 9.7 | |
| LOS by Move: | B | B | A | | B | B | A | | B | B | A | | B | C | A | |
| ApproachDel: | 10.2 | | | | 13.8 | | | | 12.5 | | | | 16.4 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 10.2 | | | | 13.8 | | | | 12.5 | | | | 16.4 | | | |
| LOS by Appr: | B | | | | B | | | | B | | | | C | | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | | 0.5 | 0.5 | 0.0 | | 0.6 | 0.6 | 0.0 | | 0.2 | 1.8 | 0.3 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 2. Miller Cr/Las Gallinas

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.706 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 15.4 |
| Optimal Cycle: | 0 | Level Of Service: | C |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 1 | 0 | 1 | 0 1 | 1 | 0 | 1 | 0 1 | 1 | 0 | 1 | 0 1 | 0 | 1 | 0 | 0 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 0.74 | 0.26 | 1.00 | |
| Final Sat.: | 452 | 485 | 534 | | 471 | 507 | 558 | | 438 | 468 | 513 | | 404 | 142 | 637 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.22 | 0.14 | | 0.18 | 0.31 | 0.10 | | 0.03 | 0.15 | 0.02 | | 0.71 | 0.71 | 0.05 | |
| Crit Moves: | | **** | | | **** | | | | | **** | | | | **** | | |
| Delay/Veh: | 10.4 | 11.5 | 9.9 | | 11.4 | 12.3 | 9.4 | | 10.6 | 11.0 | 9.3 | | 22.5 | 22.5 | 8.4 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 10.4 | 11.5 | 9.9 | | 11.4 | 12.3 | 9.4 | | 10.6 | 11.0 | 9.3 | | 22.5 | 22.5 | 8.4 | |
| LOS by Move: | B | B | A | | B | B | A | | B | B | A | | C | C | A | |
| ApproachDel: | 10.8 | | | | 11.5 | | | | 10.7 | | | | 21.4 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 10.8 | | | | 11.5 | | | | 10.7 | | | | 21.4 | | | |
| LOS by Appr: | B | | | | B | | | | B | | | | C | | | |
| AllWayAvgQ: | 0.0 | 0.2 | 0.1 | | 0.2 | 0.4 | 0.1 | | 0.0 | 0.1 | 0.0 | | 2.0 | 2.0 | 0.0 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 3. Miller Cr/Elvia Ct

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: 0 Level Of Service: C

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 | 1! | 0 0 | 1 | 0 | 0 | 1 0 | 0 | 0 | 1! | 0 0 | 0 | 0 | 1! | 0 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.60 | 0.36 | 0.04 | | 1.00 | 0.87 | 0.13 | | 0.34 | 0.01 | 0.65 | | 0.74 | 0.00 | 0.26 | |
| Final Sat.: | 383 | 230 | 24 | | 586 | 565 | 83 | | 206 | 3 | 398 | | 357 | 0 | 127 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.46 | 0.46 | 0.46 | | 0.01 | 0.70 | 0.70 | | 0.39 | 0.39 | 0.39 | | 0.04 | xxxx | 0.04 | |
| Crit Moves: | **** | | | | | | **** | | | **** | | | **** | | | |
| Delay/Veh: | 12.7 | 12.7 | 12.7 | | 8.8 | 19.3 | 19.3 | | 11.6 | 11.6 | 11.6 | | 9.5 | 0.0 | 9.5 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 12.7 | 12.7 | 12.7 | | 8.8 | 19.3 | 19.3 | | 11.6 | 11.6 | 11.6 | | 9.5 | 0.0 | 9.5 | |
| LOS by Move: | B | | B | | A | C | C | | B | B | B | | A | * | A | |
| ApproachDel: | 12.7 | | | | 19.1 | | | | 11.6 | | | | 9.5 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 12.7 | | | | 19.1 | | | | 11.6 | | | | 9.5 | | | |
| LOS by Appr: | B | | | | C | | | | B | | | | A | | | |
| AllWayAvgQ: | 0.8 | 0.8 | 0.8 | | 0.0 | 2.0 | 2.0 | | 0.5 | 0.5 | 0.5 | | 0.0 | 0.0 | 0.0 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Las Gallinas/Lucas Valley Rd

Cycle (sec): 90 Critical Vol./Cap.(X): 0.613
Loss Time (sec): 4 (Y+R=2.0 sec) Average Delay (sec/veh): 28.2
Optimal Cycle: 28 Level Of Service: C

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Protected | | | | Protected | | | | Protected | | | | Protected | | | |
| Rights: | Ignore | | | | Ignore | | | | Ignore | | | | Ignore | | | |
| Min. Green: | 8 | 0 | 0 | | 8 | 0 | 0 | | 8 | 0 | 0 | | 8 | 0 | 0 | |
| Lanes: | 1 | 0 | 1 | 0 1 | 1 | 0 | 1 | 0 1 | 1 | 0 | 1 | 0 1 | 1 | 0 | 1 | 0 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 116 | 194 | 152 | | 164 | 380 | 36 | | 37 | 462 | 246 | | 47 | 254 | 81 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 116 | 194 | 152 | | 164 | 380 | 36 | | 37 | 462 | 246 | | 47 | 254 | 81 | |
| User Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| PHF Adj: | 0.91 | 0.91 | 0.00 | | 0.91 | 0.91 | 0.00 | | 0.91 | 0.91 | 0.00 | | 0.91 | 0.91 | 0.00 | |
| PHF Volume: | 127 | 213 | 0 | | 180 | 418 | 0 | | 41 | 508 | 0 | | 52 | 279 | 0 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 127 | 213 | 0 | | 180 | 418 | 0 | | 41 | 508 | 0 | | 52 | 279 | 0 | |
| PCE Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| MLF Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| FinalVolume: | 127 | 213 | 0 | | 180 | 418 | 0 | | 41 | 508 | 0 | | 52 | 279 | 0 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | |
| Adjustment: | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Sat.: | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.11 | 0.00 | | 0.10 | 0.22 | 0.00 | | 0.02 | 0.27 | 0.00 | | 0.03 | 0.15 | 0.00 | |
| Crit Moves: | **** | | | | | **** | | | | **** | | | **** | | | |
| Green/Cycle: | 0.11 | 0.24 | 0.00 | | 0.21 | 0.34 | 0.00 | | 0.19 | 0.42 | 0.00 | | 0.09 | 0.31 | 0.00 | |
| Volume/Cap: | 0.64 | 0.47 | 0.00 | | 0.47 | 0.64 | 0.00 | | 0.12 | 0.64 | 0.00 | | 0.32 | 0.47 | 0.00 | |
| Uniform Del: | 38.4 | 29.4 | 0.0 | | 31.0 | 25.0 | 0.0 | | 30.2 | 21.0 | 0.0 | | 38.5 | 24.8 | 0.0 | |
| IncremntDel: | 7.1 | 0.8 | 0.0 | | 0.9 | 2.2 | 0.0 | | 0.2 | 1.8 | 0.0 | | 1.2 | 0.6 | 0.0 | |
| InitQueuDel: | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| Delay Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| Delay/Veh: | 45.4 | 30.1 | 0.0 | | 31.9 | 27.2 | 0.0 | | 30.4 | 22.8 | 0.0 | | 39.6 | 25.4 | 0.0 | |
| User DelAdj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 45.4 | 30.1 | 0.0 | | 31.9 | 27.2 | 0.0 | | 30.4 | 22.8 | 0.0 | | 39.6 | 25.4 | 0.0 | |
| LOS by Move: | D | | C | | A | C | C | | A | C | C | | A | D | C | A |
| HCM2kAvgQ: | 5 | | 5 | | 0 | 5 | 11 | | 0 | 1 | 12 | | 0 | 2 | 6 | 0 |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 5. Miller Cr/Marinwood Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.670 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 14.6 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 1 0 | 0 | 1 | 0 | 1 0 | 0 | 1 | 0 | 1 0 | 0 | 1 | 1 | 0 1 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.62 | 0.38 | 1.00 | | 0.90 | 0.10 | 1.00 | | 0.04 | 0.96 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Sat.: | 285 | 171 | 524 | | 426 | 46 | 550 | | 20 | 523 | 601 | | 522 | 570 | 633 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.09 | 0.09 | 0.14 | | 0.39 | 0.39 | 0.02 | | 0.40 | 0.40 | 0.03 | | 0.15 | 0.67 | 0.22 | |
| Crit Moves: | | | **** | | **** | | | | | **** | | | | **** | | |
| Delay/Veh: | 10.6 | 10.6 | 9.9 | | 14.1 | 14.1 | 8.9 | | 12.9 | 12.9 | 8.5 | | 10.6 | 20.1 | 9.7 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 10.6 | 10.6 | 9.9 | | 14.1 | 14.1 | 8.9 | | 12.9 | 12.9 | 8.5 | | 10.6 | 20.1 | 9.7 | |
| LOS by Move: | B | B | A | | B | B | A | | B | B | A | | B | C | A | |
| ApproachDel: | 10.2 | | | | 13.8 | | | | 12.5 | | | | 16.4 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 10.2 | | | | 13.8 | | | | 12.5 | | | | 16.4 | | | |
| LOS by Appr: | B | | | | B | | | | B | | | | C | | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | | 0.5 | 0.5 | 0.0 | | 0.6 | 0.6 | 0.0 | | 0.2 | 1.8 | 0.3 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 6. Miller Cr/Las Gallinas Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.734 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 16.8 |
| Optimal Cycle: | 0 | Level Of Service: | C |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 1! | 0 | 0 | 1 | 0 0 | 1 | 0 | 1 | 0 0 | 1 | 0 | 0 | 0 1! | 0 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.08 | 0.54 | 0.38 | | 1.00 | 0.75 | 0.25 | | 1.00 | 0.86 | 0.14 | | 0.68 | 0.24 | 0.08 | |
| Final Sat.: | 42 | 284 | 203 | | 496 | 408 | 139 | | 464 | 433 | 69 | | 388 | 136 | 45 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.38 | 0.38 | 0.38 | | 0.17 | 0.39 | 0.39 | | 0.03 | 0.16 | 0.16 | | 0.73 | 0.73 | 0.73 | |
| Crit Moves: | | | **** | | | **** | | | | **** | | | | **** | | |
| Delay/Veh: | 12.9 | 12.9 | 12.9 | | 10.9 | 12.5 | 12.5 | | 10.0 | 10.4 | 10.4 | | 23.4 | 23.4 | 23.4 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 12.9 | 12.9 | 12.9 | | 10.9 | 12.5 | 12.5 | | 10.0 | 10.4 | 10.4 | | 23.4 | 23.4 | 23.4 | |
| LOS by Move: | B | B | B | | B | B | B | | B | B | B | | C | C | C | |
| ApproachDel: | 12.9 | | | | 12.1 | | | | 10.3 | | | | 23.4 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 12.9 | | | | 12.1 | | | | 10.3 | | | | 23.4 | | | |
| LOS by Appr: | B | | | | B | | | | B | | | | C | | | |
| AllWayAvgQ: | 0.5 | 0.5 | 0.5 | | 0.2 | 0.5 | 0.5 | | 0.0 | 0.2 | 0.2 | | 2.2 | 2.2 | 2.2 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 7. Miller Cr/Elvia Ct Alt 1

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.645 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 13.6 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 | 1! | 0 0 | 0 | 0 | 1! | 0 0 | 0 | 0 | 1! | 0 0 | 0 | 0 | 1! | 0 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.60 | 0.36 | 0.04 | | 0.01 | 0.86 | 0.13 | | 0.34 | 0.01 | 0.65 | | 0.74 | 0.00 | 0.26 | |
| Final Sat.: | 393 | 236 | 25 | | 11 | 612 | 90 | | 209 | 3 | 406 | | 363 | 0 | 130 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.45 | 0.45 | 0.45 | | 0.65 | 0.65 | 0.65 | | 0.39 | 0.39 | 0.39 | | 0.04 | xxxx | 0.04 | |
| Crit Moves: | | | **** | | **** | | | | | | **** | | | | | |
| Delay/Veh: | 12.2 | 12.2 | 12.2 | | 15.9 | 15.9 | 15.9 | | 11.3 | 11.3 | 11.3 | | 9.3 | 0.0 | 9.3 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 12.2 | 12.2 | 12.2 | | 15.9 | 15.9 | 15.9 | | 11.3 | 11.3 | 11.3 | | 9.3 | 0.0 | 9.3 | |
| LOS by Move: | B | B | B | | C | C | C | | B | B | B | | A | * | A | |
| ApproachDel: | 12.2 | | | | 15.9 | | | | 11.3 | | | | 9.3 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 12.2 | | | | 15.9 | | | | 11.3 | | | | 9.3 | | | |
| LOS by Appr: | B | | | | C | | | | B | | | | A | | | |
| AllWayAvgQ: | 0.7 | 0.7 | 0.7 | | 1.6 | 1.6 | 1.6 | | 0.5 | 0.5 | 0.5 | | 0.0 | 0.0 | 0.0 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 9. Miller Cr/Marinwood Alt 2

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.812 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 18.6 |
| Optimal Cycle: | 0 | Level Of Service: | C |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 | 1! | 0 0 | 0 | 0 | 1! | 0 0 | 0 | 0 | 1! | 0 0 | 1 | 0 | 0 | 1 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 25 | 15 | 71 | | 165 | 18 | 10 | | 8 | 207 | 17 | | 78 | 382 | 140 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.23 | 0.13 | 0.64 | | 0.86 | 0.09 | 0.05 | | 0.03 | 0.90 | 0.07 | | 1.00 | 0.73 | 0.27 | |
| Final Sat.: | 121 | 73 | 343 | | 452 | 49 | 27 | | 21 | 533 | 44 | | 573 | 470 | 172 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.21 | 0.21 | 0.21 | | 0.37 | 0.37 | 0.37 | | 0.39 | 0.39 | 0.39 | | 0.14 | 0.81 | 0.81 | |
| Crit Moves: | | | | | **** | | | | | | **** | | | | **** | |
| Delay/Veh: | 10.4 | 10.4 | 10.4 | | 12.5 | 12.5 | 12.5 | | 12.0 | 12.0 | 12.0 | | 9.9 | 26.8 | 26.8 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 10.4 | 10.4 | 10.4 | | 12.5 | 12.5 | 12.5 | | 12.0 | 12.0 | 12.0 | | 9.9 | 26.8 | 26.8 | |
| LOS by Move: | B | B | B | | B | B | B | | B | B | B | | A | D | D | |
| ApproachDel: | 10.4 | | | | 12.5 | | | | 12.0 | | | | 24.6 | | | |
| Delay Adj: | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| ApprAdjDel: | 10.4 | | | | 12.5 | | | | 12.0 | | | | 24.6 | | | |
| LOS by Appr: | B | | | | B | | | | B | | | | C | | | |
| AllWayAvgQ: | 0.2 | 0.2 | 0.2 | | 0.5 | 0.5 | 0.5 | | 0.5 | 0.5 | 0.5 | | 0.2 | 3.3 | 3.3 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #10 10. Miller Cr/Las Gallinas Alt 2

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.533 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 12.4 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 1 | 0 1 | 1 | 0 | 1 | 0 0 | 1 | 0 | 1 | 0 0 | 1 | 0 | 1 | 0 0 | 1 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 16 | 108 | 77 | | 83 | 158 | 54 | | 14 | 69 | 11 | | 285 | 100 | 33 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 1.17 | 0.83 | | 1.00 | 0.75 | 0.25 | | 1.00 | 0.86 | 0.14 | | 1.00 | 0.75 | 0.25 | |
| Final Sat.: | 466 | 591 | 452 | | 508 | 421 | 144 | | 479 | 450 | 72 | | 535 | 443 | 146 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.18 | 0.17 | | 0.16 | 0.38 | 0.38 | | 0.03 | 0.15 | 0.15 | | 0.53 | 0.23 | 0.23 | |
| Crit Moves: | | **** | | | | **** | | | | **** | | | | **** | | |
| Delay/Veh: | 10.3 | 10.8 | 10.1 | | 10.7 | 12.2 | 12.2 | | 9.9 | 10.2 | 10.2 | | 16.1 | 10.2 | 10.2 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 10.3 | 10.8 | 10.1 | | 10.7 | 12.2 | 12.2 | | 9.9 | 10.2 | 10.2 | | 16.1 | 10.2 | 10.2 | |
| LOS by Move: | B | B | B | | B | B | B | | A | B | B | | C | B | B | |
| ApproachDel: | | 10.5 | | | | 11.8 | | | | 10.2 | | | | 14.2 | | |
| Delay Adj: | | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | |
| ApprAdjDel: | | 10.5 | | | | 11.8 | | | | 10.2 | | | | 14.2 | | |
| LOS by Appr: | | B | | | | B | | | | B | | | | B | | |
| AllWayAvgQ: | 0.0 | 0.2 | 0.2 | | 0.2 | 0.5 | 0.5 | | 0.0 | 0.2 | 0.2 | | 1.0 | 0.3 | 0.3 | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #11 11. Miller Cr/Elvia Ct Alt 2

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.699 |
| Loss Time (sec): | 0 (Y+R=4.0 sec) | Average Delay (sec/veh): | 15.3 |
| Optimal Cycle: | 0 | Level Of Service: | C |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 1! | 0 | 0 | 1 | 0 0 | 1 | 0 | 0 | 0 1! | 0 | 0 | 0 | 0 1! | 0 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 175 | 105 | 11 | | 7 | 395 | 58 | | 81 | 1 | 157 | | 14 | 0 | 5 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.60 | 0.36 | 0.04 | | 1.00 | 0.87 | 0.13 | | 0.34 | 0.01 | 0.65 | | 0.74 | 0.00 | 0.26 | |
| Final Sat.: | 383 | 230 | 24 | | 586 | 565 | 83 | | 206 | 3 | 398 | | 357 | 0 | 127 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.46 | 0.46 | 0.46 | | 0.01 | 0.70 | 0.70 | | 0.39 | 0.39 | 0.39 | | 0.04 | xxxx | 0.04 | |
| Crit Moves: | **** | | | | | | **** | | | **** | | | **** | | | |
| Delay/Veh: | 12.7 | 12.7 | 12.7 | | 8.8 | 19.3 | 19.3 | | 11.6 | 11.6 | 11.6 | | 9.5 | 0.0 | 9.5 | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 12.7 | 12.7 | 12.7 | | 8.8 | 19.3 | 19.3 | | 11.6 | 11.6 | 11.6 | | 9.5 | 0.0 | 9.5 | |
| LOS by Move: | B | B | B | | A | C | C | | B | B | B | | A | * | A | |
| ApproachDel: | | 12.7 | | | | 19.1 | | | | 11.6 | | | | 9.5 | | |
| Delay Adj: | | 1.00 | | | | 1.00 | | | | 1.00 | | | | 1.00 | | |
| ApprAdjDel: | | 12.7 | | | | 19.1 | | | | 11.6 | | | | 9.5 | | |
| LOS by Appr: | | B | | | | C | | | | B | | | | A | | |
| AllWayAvgQ: | 0.8 | 0.8 | 0.8 | | 0.0 | 2.0 | 2.0 | | 0.5 | 0.5 | 0.5 | | 0.0 | 0.0 | 0.0 | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 Las Gallinas/Lucas Valley Rd Alt 2

| | | | |
|---|---|---|---|
| Cycle (sec): | 90 | Critical Vol./Cap.(X): | 0.613 |
| Loss Time (sec): | 4 (Y+R=2.0 sec) | Average Delay (sec/veh): | 28.2 |
| Optimal Cycle: | 28 | Level Of Service: | C |

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Protected | | | | Protected | | | | Protected | | | | Protected | | | |
| Rights: | Ignore | | | | Ignore | | | | Ignore | | | | Ignore | | | |
| Min. Green: | 8 | 0 | 0 | | 8 | 0 | 0 | | 8 | 0 | 0 | | 8 | 0 | 0 | |
| Lanes: | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 | 1 | 0 1 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 116 | 194 | 152 | | 164 | 380 | 36 | | 37 | 462 | 246 | | 47 | 254 | 81 | |
| Growth Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Initial Bse: | 116 | 194 | 152 | | 164 | 380 | 36 | | 37 | 462 | 246 | | 47 | 254 | 81 | |
| User Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| PHF Adj: | 0.91 | 0.91 | 0.00 | | 0.91 | 0.91 | 0.00 | | 0.91 | 0.91 | 0.00 | | 0.91 | 0.91 | 0.00 | |
| PHF Volume: | 127 | 213 | 0 | | 180 | 418 | 0 | | 41 | 508 | 0 | | 52 | 279 | 0 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 127 | 213 | 0 | | 180 | 418 | 0 | | 41 | 508 | 0 | | 52 | 279 | 0 | |
| PCE Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| MLF Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| FinalVolume: | 127 | 213 | 0 | | 180 | 418 | 0 | | 41 | 508 | 0 | | 52 | 279 | 0 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | | 1900 | 1900 | 1900 | |
| Adjustment: | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | | 0.95 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Sat.: | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | | 1805 | 1900 | 1900 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.11 | 0.00 | | 0.10 | 0.22 | 0.00 | | 0.02 | 0.27 | 0.00 | | 0.03 | 0.15 | 0.00 | |
| Crit Moves: | **** | | | | | **** | | | | **** | | | **** | | | |
| Green/Cycle: | 0.11 | 0.24 | 0.00 | | 0.21 | 0.34 | 0.00 | | 0.19 | 0.42 | 0.00 | | 0.09 | 0.31 | 0.00 | |
| Volume/Cap: | 0.64 | 0.47 | 0.00 | | 0.47 | 0.64 | 0.00 | | 0.12 | 0.64 | 0.00 | | 0.32 | 0.47 | 0.00 | |
| Uniform Del: | 38.4 | 29.4 | 0.0 | | 31.0 | 25.0 | 0.0 | | 30.2 | 21.0 | 0.0 | | 38.5 | 24.8 | 0.0 | |
| IncremntDel: | 7.1 | 0.8 | 0.0 | | 0.9 | 2.2 | 0.0 | | 0.2 | 1.8 | 0.0 | | 1.2 | 0.6 | 0.0 | |
| InitQueuDel: | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| Delay Adj: | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | | 1.00 | 1.00 | 0.00 | |
| Delay/Veh: | 45.4 | 30.1 | 0.0 | | 31.9 | 27.2 | 0.0 | | 30.4 | 22.8 | 0.0 | | 39.6 | 25.4 | 0.0 | |
| User DelAdj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| AdjDel/Veh: | 45.4 | 30.1 | 0.0 | | 31.9 | 27.2 | 0.0 | | 30.4 | 22.8 | 0.0 | | 39.6 | 25.4 | 0.0 | |
| LOS by Move: | D | C | A | | C | C | A | | C | C | A | | D | C | A | |
| HCM2kAvgQ: | 5 | 5 | 0 | | 5 | 11 | 0 | | 1 | 12 | 0 | | 2 | 6 | 0 | |

Note: Queue reported is the number of cars per lane.

SIDRA INTERSECTION

# Movement Summary

## Marinwood Ave / Miller Creek Rd Roundabout

### 2010 AM Peak

**Roundabout**

### Vehicle Movements

| Mov ID | Turn | Dem Flow (veh/h) | %HV | Deg of Satn (v/c) | Aver Delay (sec) | Level of Service | 95% Back of Queue (ft) | Prop. Queued | Eff. Stop Rate | Aver Speed (mph) |
|---|---|---|---|---|---|---|---|---|---|---|
| **NB Marinwood Ave** | | | | | | | | | | |
| 3L | L | 29 | 3.3 | 0.114 | 18.1 | LOS B | 13 | 0.36 | 0.76 | 34.3 |
| 8T | T | 14 | 50.0 | 0.114 | 12.8 | LOS B | 13 | 0.36 | 0.64 | 39.5 |
| 8R | R | 65 | 1.6 | 0.114 | 11.5 | LOS B | 13 | 0.36 | 0.65 | 38.5 |
| **Approach** | | **108** | **8.3** | **0.114** | **13.5** | **LOS B** | **13** | **0.36** | **0.68** | **37.3** |
| **WB Miller Creek Rd** | | | | | | | | | | |
| 1L | L | 73 | 2.7 | 0.451 | 17.1 | LOS B | 66 | 0.16 | 0.71 | 35.0 |
| 6T | T | 397 | 2.0 | 0.452 | 9.1 | LOS A | 66 | 0.16 | 0.53 | 41.0 |
| 6R | R | 148 | 16.9 | 0.451 | 11.3 | LOS B | 66 | 0.16 | 0.59 | 39.7 |
| **Approach** | | **618** | **5.7** | **0.452** | **10.6** | **LOS B** | **66** | **0.16** | **0.57** | **39.8** |
| **SB Marinwood Ave** | | | | | | | | | | |
| 7L | L | 172 | 14.5 | 0.229 | 19.5 | LOS B | 30 | 0.44 | 0.81 | 34.0 |
| 4T | T | 17 | 23.5 | 0.230 | 12.1 | LOS B | 30 | 0.44 | 0.68 | 39.0 |
| 4R | R | 9 | 10.0 | 0.227 | 12.3 | LOS B | 30 | 0.44 | 0.70 | 38.0 |
| **Approach** | | **199** | **15.1** | **0.229** | **18.5** | **LOS B** | **30** | **0.44** | **0.80** | **34.6** |
| **EB Miller Creek Rd** | | | | | | | | | | |
| 5L | L | 6 | 14.3 | 0.226 | 18.0 | LOS B | 26 | 0.32 | 0.76 | 34.5 |
| 2T | T | 218 | 2.3 | 0.223 | 9.8 | LOS A | 26 | 0.32 | 0.61 | 39.8 |
| 2R | R | 15 | 6.7 | 0.224 | 11.1 | LOS B | 26 | 0.32 | 0.64 | 38.7 |
| **Approach** | | **240** | **2.9** | **0.223** | **10.1** | **LOS B** | **26** | **0.32** | **0.62** | **39.6** |
| **All Vehicles** | | **1165** | **7.0** | **0.452** | **12.1** | **LOS B** | **66** | **0.26** | **0.63** | **38.5** |

Symbols which may appear in this table:

Following Degree of Saturation
# x = 1.00 for Short Lane with resulting Excess Flow
* x = 1.00 due to minimum capacity

Following LOS
# - Based on density for continuous movements

Following Queue

# - Density for continuous movement

SIDRA SOLUTIONS

Site: 2010 AM
P:\P\10\10017-000 Las Gallinas Bike and Ped\Sidra\Marinwood Roundabout.aap
Processed Apr 20, 2010 02:18:25PM

M0115, DKS associates, Small Office

## Scenario Report

| | |
|---|---|
| Scenario: | AM |
| Command: | Default Command |
| Volume: | AM |
| Geometry: | Default Geometry |
| Impact Fee: | Default Impact Fee |
| Trip Generation: | Default Trip Generation |
| Trip Distribution: | Default Trip Distribution |
| Paths: | Default Path |
| Routes: | Default Route |
| Configuration: | Default Configuration |





## Impact Analysis Report
### Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 14 Miller Creek Rd / US 101 SB Al | C | 20.1 | 0.000 | C | 20.1 | 0.000 | + 0.000 D/V |
| # 15 Miller Creek Rd / US 101 SB | D | 25.2 | 0.000 | D | 25.2 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Miller Creek Rd / US 101 SB Alt #1

Average Delay (sec/veh): 17.4 Worst Case Level Of Service: C[ 20.1]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 1 | 0 0 1 | | 0 0 1 | 0 1 | | 1 | 0 1 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 14 | 515 | 685 | 0 | 116 | 179 | 9 | 74 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 14 | 515 | 685 | 0 | 116 | 179 | 9 | 74 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 14 | 515 | 685 | 0 | 116 | 0 | 9 | 74 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 14 | 515 | 685 | 0 | 116 | 0 | 9 | 74 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | 6.5 | 6.2 | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 208 | 208 | 74 | xxxx | xxxx | xxxxx | 116 | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 785 | 692 | 993 | xxxx | xxxx | xxxxx | 1485 | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 781 | 688 | 993 | xxxx | xxxx | xxxxx | 1485 | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.02 | 0.75 | 0.69 | xxxx | xxxx | xxxx | 0.01 | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| 2Way95thQ: | xxxx | xxxx | xxxxx | xxxx | xxxx | 5.8 | xxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 16.3 | xxxxx | xxxx | xxxxx | 7.4 | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | C | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | 690 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxx | xxxxx | 25.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | D | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 20.1 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #15 Miller Creek Rd / US 101 SB

Average Delay (sec/veh): 18.4 Worst Case Level Of Service: D[ 25.2]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 1 | 0 0 1 | | 0 0 1 | 0 1 | | 1 | 0 1 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 14 | 515 | 685 | 0 | 116 | 179 | 9 | 74 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 14 | 515 | 685 | 0 | 116 | 179 | 9 | 74 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 14 | 515 | 0 | 0 | 116 | 0 | 9 | 74 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 14 | 515 | 0 | 0 | 116 | 0 | 9 | 74 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | 6.5 | 6.2 | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 208 | 208 | 74 | xxxx | xxxx | xxxxx | 116 | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 785 | 692 | 993 | xxxx | xxxx | xxxxx | 1485 | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 781 | 688 | 993 | xxxx | xxxx | xxxxx | 1485 | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.02 | 0.75 | 0.00 | xxxx | xxxx | xxxx | 0.01 | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| 2Way95thQ: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.4 | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | 690 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxx | xxxxx | 25.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | D | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 25.2 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | D | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.

Base Queue Report (cars)

| Node | Intersection | Northbound L | Northbound -- | Northbound T | Northbound -- | Northbound R | Southbound L | Southbound -- | Southbound T | Southbound -- | Southbound R | Eastbound L | Eastbound -- | Eastbound T | Eastbound -- | Eastbound R | Westbound L | Westbound -- | Westbound T | Westbound -- | Westbound R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| #14 | [2Way95thQ]: | xxxx | xxxx | xxxx | | | 7.2 | | 7.2 | | 5.8 | xxxx | xxxx | xxxx | | | 0.0 | xxxx | xxxx | | |
| #15 | [2Way95thQ]: | xxxx | xxxx | xxxx | | | 7.2 | | 7.2 | xxxx | xxxx | xxxx | xxxx | xxxx | | | 0.0 | xxxx | xxxx | | |

## Scenario Report

| | |
|---|---|
| Scenario: | PM |
| Command: | Default Command |
| Volume: | PM |
| Geometry: | Default Geometry |
| Impact Fee: | Default Impact Fee |
| Trip Generation: | Default Trip Generation |
| Trip Distribution: | Default Trip Distribution |
| Paths: | Default Path |
| Routes: | Default Route |
| Configuration: | Default Configuration |





## Impact Analysis Report
### Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 14 Miller Creek Rd / US 101 SB Al | B | 11.9 | 0.000 | B | 11.9 | 0.000 | + 0.000 D/V |
| # 15 Miller Creek Rd / US 101 SB | B | 13.4 | 0.000 | B | 13.4 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Miller Creek Rd / US 101 SB Alt #1

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: B[ 11.9]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Lanes: | 0 0 0 | 0 | 0 | 0 1 | 0 | 0 1 | 0 0 | 1 | 0 1 | 1 | 0 1 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 26 | 4 | 202 | 0 | 173 | 127 | 51 | 303 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 26 | 4 | 202 | 0 | 173 | 127 | 51 | 303 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 26 | 4 | 202 | 0 | 173 | 0 | 51 | 303 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 26 | 4 | 202 | 0 | 173 | 0 | 51 | 303 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | 6.5 | 6.2 | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 578 | 578 | 303 | xxxx | xxxx | xxxxx | 173 | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 481 | 430 | 741 | xxxx | xxxx | xxxxx | 1416 | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 468 | 414 | 741 | xxxx | xxxx | xxxxx | 1416 | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.06 | 0.01 | 0.27 | xxxx | xxxx | xxxx | 0.04 | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| 2Way95thQ: | xxxx | xxxx | xxxxx | xxxx | xxxx | 1.1 | xxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 11.7 | xxxxx | xxxx | xxxxx | 7.6 | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | B | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | 460 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | 0.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxx | xxxxx | 13.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | B | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 11.9 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.





Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #15 Miller Creek Rd / US 101 SB

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[ 13.4]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Ignore | | | Ignore | | | Include | | |
| Lanes: | 0 0 0 | 0 | 0 | 0 1 | 0 | 0 1 | 0 0 | 1 | 0 1 | 1 | 0 1 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 26 | 4 | 202 | 0 | 173 | 127 | 51 | 303 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 26 | 4 | 202 | 0 | 173 | 127 | 51 | 303 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 26 | 4 | 0 | 0 | 173 | 0 | 51 | 303 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 26 | 4 | 0 | 0 | 173 | 0 | 51 | 303 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | 6.5 | 6.2 | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 578 | 578 | 303 | xxxx | xxxx | xxxxx | 173 | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 481 | 430 | 741 | xxxx | xxxx | xxxxx | 1416 | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 468 | 414 | 741 | xxxx | xxxx | xxxxx | 1416 | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.06 | 0.01 | 0.00 | xxxx | xxxx | xxxx | 0.04 | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| 2Way95thQ: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.6 | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | 460 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | 0.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxx | xxxxx | 13.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | B | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 13.4 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.

Base Queue Report (cars)

| Node | Intersection | Northbound L | Northbound T | Northbound R | Southbound L | Southbound T | Southbound R | Eastbound L | Eastbound T | Eastbound R | Westbound L | Westbound T | Westbound R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| #14 | [2Way95thQ]: | xxxx | xxxx | xxxx | 0.2 | 0.2 | 1.1 | xxxx | xxxx | xxxx | 0.1 | xxxx | xxxx |
| #15 | [2Way95thQ]: | xxxx | xxxx | xxxx | 0.2 | 0.2 | xxxx | xxxx | xxxx | xxxx | 0.1 | xxxx | xxxx |