

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset PM Future + The Village

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 11 | 2.0 | 0.216 | 5.0 | LOS A | 1.1 | 27.1 | 0.37 | 0.23 | 23.0 |
| 8 | T1 | 12 | 2.0 | 0.216 | 5.0 | LOS A | 1.1 | 27.1 | 0.37 | 0.23 | 23.1 |
| 18 | R2 | 230 | 2.0 | 0.216 | 5.0 | LOS A | 1.1 | 27.1 | 0.37 | 0.23 | 22.8 |
| Approach | | 253 | 2.0 | 0.216 | 5.0 | LOS A | 1.1 | 27.1 | 0.37 | 0.23 | 22.8 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 251 | 2.0 | 0.327 | 5.5 | LOS A | 2.0 | 50.5 | 0.14 | 0.04 | 22.7 |
| 6 | T1 | 153 | 2.0 | 0.327 | 5.5 | LOS A | 2.0 | 50.5 | 0.14 | 0.04 | 22.7 |
| 16 | R2 | 45 | 2.0 | 0.327 | 5.5 | LOS A | 2.0 | 50.5 | 0.14 | 0.04 | 22.5 |
| Approach | | 449 | 2.0 | 0.327 | 5.5 | LOS A | 2.0 | 50.5 | 0.14 | 0.04 | 22.7 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 45 | 2.0 | 0.067 | 4.5 | LOS A | 0.3 | 7.0 | 0.48 | 0.37 | 22.8 |
| 4 | T1 | 14 | 2.0 | 0.067 | 4.5 | LOS A | 0.3 | 7.0 | 0.48 | 0.37 | 22.9 |
| 14 | R2 | 3 | 2.0 | 0.067 | 4.5 | LOS A | 0.3 | 7.0 | 0.48 | 0.37 | 22.6 |
| Approach | | 62 | 2.0 | 0.067 | 4.5 | LOS A | 0.3 | 7.0 | 0.48 | 0.37 | 22.8 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.142 | 4.8 | LOS A | 0.6 | 16.1 | 0.45 | 0.33 | 23.2 |
| 2 | T1 | 130 | 2.0 | 0.142 | 4.8 | LOS A | 0.6 | 16.1 | 0.45 | 0.33 | 23.3 |
| 12 | R2 | 15 | 2.0 | 0.142 | 4.8 | LOS A | 0.6 | 16.1 | 0.45 | 0.33 | 23.0 |
| Approach | | 146 | 2.0 | 0.142 | 4.8 | LOS A | 0.6 | 16.1 | 0.45 | 0.33 | 23.2 |
| All Vehicles | | 910 | 2.0 | 0.327 | 5.2 | LOS A | 2.0 | 50.5 | 0.28 | 0.16 | 22.8 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 73.1
Level Of Service: F

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|-----------|--------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | | | | | |
|---|--------------|------------|-------------|--------|------------|--------|------------|-----------|--------|--------|--------|--------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound | | | | |
| Base Volume Input [veh/h] | 13 | 354 | 113 | 100 | 322 | 6 | 5 | 16 | 12 | 109 | 20 | 124 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 15 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 18 | 493 | 153 | 135 | 443 | 8 | 7 | 22 | 16 | 147 | 27 | 167 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 5 | 123 | 38 | 34 | 111 | 2 | 2 | 6 | 4 | 37 | 7 | 42 |
| Total Analysis Volume [veh/h] | 18 | 493 | 153 | 135 | 443 | 8 | 7 | 22 | 16 | 147 | 27 | 167 |
| Pedestrian Volume [ped/h] | 24 | | 18 | | 18 | | 18 | | 10 | | 10 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 21.88 | 16.23 | 0.35 | 1.49 | 1.83 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 547.07 | 405.75 | 8.76 | 37.14 | 45.72 |
| Approach Delay [s/veh] | 107.08 | 73.21 | 12.43 | 14.82 | |
| Approach LOS | F | F | B | B | B |
| Intersection Delay [s/veh] | 73.12 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report
Intersection 8: Q St & 17th St

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 10.4
Level Of Service: B
Volume to Capacity (v/c): 0.006

Intersection Setup

| Name | Q St | | Q St | | 17th St | |
|------------------------|------------|--------|-----------|--------|-----------|--------|
| Approach | Northbound | | Eastbound | | Westbound | |
| Lane Configuration | T | | T | | T | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | |

volumes

| Name | Q St | | Q St | | 17th St | |
|---|--------|--------|--------|--------|---------|--------|
| Base Volume Input [veh/h] | 3 | 37 | 41 | 3 | 56 | 36 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 13 | 14 | 1 | 19 | 12 |
| Total Analysis Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 10.40 | 8.78 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.26 |
| 95th-Percentile Queue Length [ft] | 4.38 | 4.38 | 0.00 | 0.00 | 0.00 | 6.59 |
| d, A, Approach Delay [s/veh] | 8.90 | | 0.00 | 0.00 | 4.53 | |
| Approach LOS | A | | A | A | A | |
| d, I, Intersection Delay [s/veh] | | | 4.40 | | | |
| Intersection LOS | | | B | | | |

Intersection Level Of Service Report
Intersection 9: Alliance Rd/17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 26.2
 Level Of Service: D
 Volume to Capacity (v/c): 0.353

Intersection Setup

| Name | Alliance Rd Northbound | Alliance Rd Southbound | 17th St Eastbound |
|------------------------|---|---|---|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Thru | Thru | Thru |
| Turning Movement | Left 12.00 Thru 12.00 Right 12.00 | Left 12.00 Thru 12.00 Right 12.00 | Left 12.00 Thru 12.00 Right 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | No | No | Yes |
| Crosswalk | | | |

volumes

| Name | Alliance Rd | Alliance Rd | 17th St |
|---|-------------|-------------|---------|
| Base Volume Input [veh/h] | 18 | 315 | 69 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 8 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 24 | 433 | 93 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 6 | 108 | 23 |
| Total Analysis Volume [veh/h] | 24 | 433 | 93 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 0.03 |
|------------------------------------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 8.54 | 0.00 | 0.00 | 0.00 | 0.00 | 26.20 | 11.30 |
| Movement LOS | A | A | A | A | A | D | B |
| 95th-Percentile Queue Length [veh] | 2.65 | 2.65 | 0.00 | 0.00 | 0.00 | 1.53 | 0.08 |
| 95th-Percentile Queue Length [ft] | 66.22 | 66.22 | 0.00 | 0.00 | 0.00 | 38.21 | 1.97 |
| d, A, Approach Delay [s/veh] | 0.41 | | | | | | |
| Approach LOS | A | A | A | A | A | C | |
| d, I, Intersection Delay [s/veh] | | | | | 2.46 | | |
| Intersection LOS | | | | | D | | |

Intersection Level Of Service Report
Intersection 10: K 5011th St

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 81.1
Level Of Service: F

Intersection Setup

| Name | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | + | | | + | | | + | | | + | | |
| Lane Configuration | + | | | + | | | + | | | + | | |
| Turning Movement | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| Lane Width [ft] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Crosswalk | Yes | | | Yes | | | Yes | | | Yes | | |

volumes

| Name | K St | | | 11th St | | | 11th St | | | | | |
|---|--------|--------|--------|---------|--------|--------|---------|--------|--------|--------|--------|--------|
| | 96 | 283 | 37 | 54 | 233 | 7 | 21 | 104 | 84 | 52 | 121 | 46 |
| Base Volume Input [veh/h] | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Base Volume Adjustment Factor | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Heavy Vehicles Percentage [%] | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| Growth Rate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| In-Process Volume [veh/h] | 0 | 15 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 130 | 397 | 50 | 73 | 323 | 9 | 28 | 140 | 113 | 70 | 163 | 62 |
| Total Hourly Volume [veh/h] | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 33 | 89 | 13 | 18 | 81 | 2 | 7 | 35 | 28 | 18 | 41 | 16 |
| Total 15-Minute Volume [veh/h] | 130 | 397 | 50 | 73 | 323 | 9 | 28 | 140 | 113 | 70 | 163 | 62 |
| Total Analyse Volume [veh/h] | 17 | | | | | | | | | | | |
| Pedestrian Volume [ped/h] | 18 | | | | | | | | | | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | Approach | 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|----------|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| Thru | F | 23.94 | 9.70 | 4.51 | D | 81.14 | F |
| Thru | F | 588.44 | 242.48 | 112.69 | D | | |
| Thru | F | 158.27 | 48.60 | 25.56 | D | | |

Intersection Level Of Service Report
Intersection 11: 11th St/Janes Rd

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 11.6
Level Of Service: B
Volume to Capacity (v/c): 0.002

Intersection Setup

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | |
|------------------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | | |
|---|---------|-------|----------|-------|---------|-------|---------|-------|-------|-------|
| | 4 | 49 | 29 | 24 | 1 | 25 | 7 | 47 | 29 | 58 |
| Base Volume Input [veh/h] | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Base Volume Adjustment Factor | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Heavy Vehicles Percentage [%] | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| Growth Rate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 |
| Total Hourly Volume [veh/h] | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Peak Hour Factor | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Other Adjustment Factor | 1 | 17 | 17 | 10 | 8 | 0 | 9 | 2 | 16 | 10 |
| Total 15-Minute Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 |
| Total Analysis Volume [veh/h] | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 7 |
| Pedestrian Volume [ped/h] | | | | | | | | | | |

Intersection Settings

| Priority Scheme | Free | Free | Stop | Stop |
|------------------------------------|------|------|------|------|
| Flared Lane | | | Yes | Yes |
| Storage Area [veh] | 0 | 0 | 1 | 1 |
| Two-Stage Gap Acceptance | | | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | 0.06 | 0.08 |
|------------------------------------|------|------|------|------|-------|------|------|-------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 7.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.63 | 11.12 | 8.79 | 11.20 |
| Movement LOS | A | A | A | A | A | A | A | B | A | B | A |
| 95th-Percentile Queue Length [veh] | 0.29 | 0.29 | 0.29 | 0.16 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.56 | 0.56 |
| 95th-Percentile Queue Length [ft] | 7.16 | 7.16 | 7.16 | 3.96 | 3.96 | 3.96 | 4.52 | 4.52 | 4.52 | 14.07 | 14.07 |
| d_A, Approach Delay [s/veh] | 0.27 | | 4.11 | | 10.65 | | B | | B | | 10.44 |
| Approach LOS | A | | A | | A | | B | | B | | B |
| d_I, Intersection Delay [s/veh] | | | 6.19 | | B | | | | | | |
| Intersection LOS | | | B | | | | | | | | |

Intersection Level Of Service Report

Intersection 12: James Rd/Foster Ave

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 9.3
 Level Of Service: A
 Volume to Capacity (v/c): 0.017

Intersection Setup

| Name | Foster Ave | James Rd | Foster Ave |
|------------------------|---------------|----------------|---------------|
| Approach | Northbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 | Right 12.00 | Thru 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | Foster Ave | James Rd | Foster Ave |
|---|------------|----------|------------|
| Base Volume Input [veh/h] | 11 | 9 | 28 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 15 | 12 | 38 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 4 | 3 | 10 |
| Total Analysis Volume [veh/h] | 15 | 35 | 38 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.03 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 |
|------------------------------------|------|------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.32 | 8.57 | 0.00 | 0.00 | 0.00 | 7.30 | 0.00 |
| Movement LOS | A | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.16 | 0.16 | 0.00 | 0.00 | 0.00 | 0.10 | 0.10 |
| 95th-Percentile Queue Length [ft] | 3.94 | 3.94 | 0.00 | 0.00 | 0.00 | 2.52 | 2.52 |
| d, A, Approach Delay [s/veh] | 8.79 | | 0.00 | 0.00 | 0.00 | 5.34 | |
| Approach LOS | A | | A | A | A | A | |
| d, I, Intersection Delay [s/veh] | | | | | 6.08 | | |
| Intersection LOS | | | | | A | | |

Intersection Level Of Service Report

Intersection 13: Foster Avenue/ Creekside Prj Driveway

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 9.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.000

Intersection Setup

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|------------------------|---------------------------|--------------------------|---------------------------|
| Approach | Southbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 Right 12.00 | Thru 12.00 Left 12.00 | Thru 12.00 Right 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.000 | 100.000 | 100.000 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes |
| Crosswalk | | | |

volumes

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|---|------------------|------------|------------|
| Base Volume Input [veh/h] | 0 | 0 | 40 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 0 | 54 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 0 | 14 |
| Total Analysis Volume [veh/h] | 0 | 0 | 54 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.03 | 8.54 | 7.31 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 8.79 | | | | |
| Approach LOS | A | A | A | A | A |
| d, I, Intersection Delay [s/veh] | | | 0.00 | | |
| Intersection LOS | | | A | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.016

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Thru | Left | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | Yes | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Base Volume Input [veh/h] | 5 | 0 | 5 | 184 | 0 | 6 | 8 | 99 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 2 | 0 | 2 | 62 | 0 | 2 | 3 | 34 |
| Total Analysis Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 |

Intersection Settings

| Priority Scheme | Stop | Free | Stop | Free |
|------------------------------------|------|------|------|------|
| Flared Lane | Yes | | No | |
| Storage Area [veh] | 1 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|-------|-------|------|
| d_M, Delay for Movement [s/veh] | 10.57 | 0.00 | 9.70 | 0.00 | 0.00 | 0.00 | 0.00 | 10.88 | 8.97 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.82 | 0.00 | 0.82 | 0.00 | 0.00 | 0.00 | 0.00 | 12.37 | 12.37 | 0.00 |
| d_A, Approach Delay [s/veh] | 10.14 | | | | | | | | | |
| Approach LOS | B | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 3.53 | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 13.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.222

Intersection Setup

| | | | |
|------------------------|-----------------|-----------------|------------|
| Name | LK Wood Blvd | LK Wood Blvd | Eastbound |
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Left Thru Right | Left Thru Right | Left Right |
| Turning Movement | Left Thru Right | Left Thru Right | Left Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | 25.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

Intersection Settings

| | | | | |
|------------------------------------|------|------|------|------|
| Priority Scheme | Free | Free | Stop | Free |
| Flared Lane | | | Yes | |
| Storage Area [veh] | 0 | 0 | 1 | 0 |
| Two-Stage Gap Acceptance | | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| | | | | | | |
|------------------------------------|------|------|-------|-------|-------|-------|
| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.22 | 0.03 | 0.01 | 0.00 |
| d, M, Delay for Movement [s/veh] | 0.00 | 0.00 | 13.23 | 10.50 | 7.50 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.85 | 0.85 | 0.64 | 0.64 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 21.16 | 21.16 | 15.94 | 15.94 |
| d, A, Approach Delay [s/veh] | 0.00 | 0.00 | 12.74 | | 0.32 | |
| Approach LOS | A | A | B | | A | |
| d, I, Intersection Delay [s/veh] | | | 3.51 | | | |
| Intersection LOS | | | B | | | |

volumes

| | | | | |
|---|--------------|--------------|--------|--------|
| Name | LK Wood Blvd | LK Wood Blvd | 8 | 181 |
| Base Volume Input [veh/h] | 87 | 27 | 89 | 19 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 117 | 36 | 120 | 26 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 29 | 9 | 30 | 7 |
| Total Analysis Volume [veh/h] | 117 | 36 | 120 | 26 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 |

volumes

| | | | | |
|---|--------------|--------------|--------|--------|
| Name | LK Wood Blvd | LK Wood Blvd | 11 | 244 |
| Base Volume Input [veh/h] | 117 | 36 | 120 | 26 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 117 | 36 | 120 | 26 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 29 | 9 | 30 | 7 |
| Total Analysis Volume [veh/h] | 117 | 36 | 120 | 26 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 |



Intersection Level Of Service Report
Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 17.2
Level Of Service: C

Intersection Setup

| | | | | | |
|------------------------|--------------|--------|--------------|-----------|------------|
| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
| Approach | Northbound | Thru | Southbound | Eastbound | |
| Lane Configuration | ← | | → | | ↑ |
| Turning Movement | Left | Thru | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 60.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | No | No | No | No |

volumes

| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
|---|--------------|--------|--------------|--------|------------|
| Base Volume Input [veh/h] | 95 | 183 | 225 | 158 | 392 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 2 | 0 | 0 | 0 | 8 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 130 | 128 | 247 | 213 | 537 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 33 | 62 | 76 | 53 | 134 |
| Total Analysis Volume [veh/h] | 130 | 128 | 247 | 213 | 537 |
| Pedestrian Volume [ped/h] | 75 | 0 | 0 | 0 | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 3.64 | 2.92 | 3.62 | 2.24 | 2.49 | 2.49 |
|------------------------------------|-------|-------|-------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 90.97 | 72.97 | 90.47 | 56.10 | 62.14 | 62.14 |
| Approach Delay [s/veh] | 21.98 | 18.25 | | | 14.88 | |
| Approach LOS | C | C | C | | B | |
| Intersection Delay [s/veh] | 17.25 | | | | | |
| Intersection LOS | C | | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 124.0
 Level Of Service: F
 Volume to Capacity (V/C): 0.882

Intersection Setup

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|------------------------|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Lane Configuration | TFF | | | | | | TFF | | | TFF | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 25.00 | | | 25.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|---|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 74 | 0 | 118 | 0 | 0 | 0 | 93 | 430 | 0 | 0 | 251 | 67 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 2 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 102 | 0 | 159 | 0 | 0 | 0 | 129 | 589 | 0 | 0 | 341 | 90 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 26 | 0 | 40 | 0 | 0 | 0 | 32 | 147 | 0 | 0 | 85 | 23 |
| Total Analysis Volume [veh/h] | 102 | 0 | 159 | 0 | 0 | 0 | 129 | 589 | 0 | 0 | 341 | 90 |
| Pedestrian Volume [ped/h] | 75 | | | 0 | | | 0 | | | 0 | | |



Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.88 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 | 0.11 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|------|------|------|-------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 124.02 | 35.53 | 13.39 | 0.00 | 0.00 | 0.00 | 8.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 5.39 | 0.55 | 0.55 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 134.85 | 13.77 | 13.77 | 0.00 | 0.00 | 0.00 | 9.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 56.63 | | | 0.00 | | | 1.55 | | | 0.00 | | |
| Approach LOS | F | | | A | | | A | | | A | | |
| d_I, Intersection Delay [s/veh] | | | | | | | 11.27 | | | F | | |
| Intersection LOS | | | | | | | | | | F | | |



Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop
 Delay (sec / veh): 20.6
 HCM 2010
 Level Of Service: C
 Analysis Method:
 Analysis Period: 15 minutes

Intersection Setup

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|------------------------|------------|--------|--------|--------------|--------|--------|------------|--------|-------|------------|--------|--------|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Approach | | | | | | | | | | | | |
| Lane Configuration | + | | | | | | | | | | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 30.00 | | | 30.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|---|------------|--------|--------|--------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Base Volume Input [veh/h] | 35 | 7 | 11 | 311 | 391 | 190 | 128 | 201 | 46 | 90 | 123 | 112 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 1 | 0 | 0 | 0 | 0 | 1 | 8 | 11 | 5 | 0 | 4 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 48 | 9 | 15 | 420 | 528 | 258 | 181 | 282 | 67 | 122 | 170 | 151 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 12 | 2 | 4 | 105 | 132 | 65 | 45 | 71 | 17 | 31 | 43 | 38 |
| Total Analysis Volume [veh/h] | 48 | 9 | 15 | 420 | 528 | 258 | 181 | 282 | 67 | 122 | 170 | 151 |
| Pedestrian Volume [ped/h] | 60 | | | 0 | | | 0 | | | 0 | | |



Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | A | | | C | | | C | | |
|-----------------------------------|------|-------|-------|-------|--------|-------|-------|-------|-------|
| | 8.89 | 2.80 | 2.28 | 2.02 | 4.05 | 0.46 | 1.20 | 1.80 | 1.35 |
| 95th-Percentile Queue Length [ft] | 0.38 | 2.80 | 2.28 | 2.02 | 4.05 | 0.46 | 1.20 | 1.80 | 1.35 |
| Approach Delay [s/veh] | 9.55 | 222.1 | 70.05 | 56.91 | 101.16 | 11.55 | 30.08 | 44.90 | 33.69 |
| Approach LOS | 9.40 | 23.99 | | | 18.99 | | | 14.90 | |
| Intersection Delay [s/veh] | A | | | C | | | C | | |
| Intersection LOS | | | | 20.56 | | | C | | |



MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset AM Future + Canyon Creek

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 35 | 2.0 | 0.262 | 6.0 | LOS A | 1.3 | 32.8 | 0.48 | 0.37 | 22.8 |
| 8 | T1 | 1 | 2.0 | 0.262 | 6.0 | LOS A | 1.3 | 32.8 | 0.48 | 0.37 | 22.8 |
| 18 | R2 | 238 | 2.0 | 0.262 | 6.0 | LOS A | 1.3 | 32.8 | 0.48 | 0.37 | 22.5 |
| Approach | | 274 | 2.0 | 0.262 | 6.0 | LOS A | 1.3 | 32.8 | 0.48 | 0.37 | 22.6 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 247 | 2.0 | 0.351 | 5.8 | LOS A | 2.2 | 55.6 | 0.19 | 0.07 | 22.7 |
| 6 | T1 | 216 | 2.0 | 0.351 | 5.8 | LOS A | 2.2 | 55.6 | 0.19 | 0.07 | 22.7 |
| 16 | R2 | 13 | 2.0 | 0.351 | 5.8 | LOS A | 2.2 | 55.6 | 0.19 | 0.07 | 22.4 |
| Approach | | 476 | 2.0 | 0.351 | 5.8 | LOS A | 2.2 | 55.6 | 0.19 | 0.07 | 22.7 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 56 | 2.0 | 0.085 | 5.1 | LOS A | 0.3 | 8.8 | 0.53 | 0.44 | 22.7 |
| 4 | T1 | 15 | 2.0 | 0.085 | 5.1 | LOS A | 0.3 | 8.8 | 0.53 | 0.44 | 22.7 |
| 14 | R2 | 1 | 2.0 | 0.085 | 5.1 | LOS A | 0.3 | 8.8 | 0.53 | 0.44 | 22.4 |
| Approach | | 72 | 2.0 | 0.085 | 5.1 | LOS A | 0.3 | 8.8 | 0.53 | 0.44 | 22.7 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 23.0 |
| 2 | T1 | 230 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 23.0 |
| 12 | R2 | 14 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 22.8 |
| Approach | | 245 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 23.0 |
| All Vehicles | | 1067 | 2.0 | 0.351 | 5.8 | LOS A | 2.2 | 55.6 | 0.36 | 0.24 | 22.7 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 39.6
Level Of Service: E

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|--------|
| | Northbound | Southbound | Left | Right | Left | Right | Left | Right |
| Approach | + | | + | | + | | + | |
| Lane Configuration | + | | + | | + | | + | |
| Turning Movement | Left | Right | Thru | Right | Left | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | |

volumes

| Name | Alliance Ave | | | Alliance Rd | | | Foster Ave | | | Foster Ave | | |
|---|--------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | 3 | 232 | 116 | 120 | 290 | 3 | 5 | 11 | 8 | 185 | 5 | 65 |
| Base Volume Input [veh/h] | 3 | 232 | 116 | 120 | 290 | 3 | 5 | 11 | 8 | 185 | 5 | 65 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 313 | 158 | 163 | 392 | 4 | 7 | 15 | 11 | 255 | 7 | 91 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 78 | 40 | 41 | 98 | 1 | 2 | 4 | 3 | 64 | 2 | 23 |
| Total Analysis Volume [veh/h] | 4 | 313 | 158 | 163 | 392 | 4 | 7 | 15 | 11 | 255 | 7 | 91 |
| Pedestrian Volume [ped/h] | 14 | | | 7 | | | 15 | | | 10 | | |



Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 8.66 | 14.04 | 0.25 | 3.60 | 0.70 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 216.40 | 350.92 | 6.29 | 90.05 | 17.49 |
| Approach Delay [s/veh] | 33.18 | 59.73 | 12.19 | 18.83 | C |
| Approach LOS | D | F | B | | |
| Intersection Delay [s/veh] | 39.58 | | | | |
| Intersection LOS | E | | | | |



Intersection Level Of Service Report
Intersection 8: Q St & 17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 13.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.002

Intersection Setup

| Name | Q St | Q St | Q St | 17th St |
|------------------------|------------------------------|-------------------------------|------------------------------|------------------------------|
| Approach | Northbound | Eastbound | Westbound | |
| Lane Configuration | | | | |
| Turning Movement | Left 12.00 0 100.00 | Right 12.00 0 100.00 | Thru 12.00 0 100.00 | Left 12.00 0 100.00 |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | No | No | No |

volumes

| Name | Q St | Q St | Q St | 17th St |
|---|--------|--------|--------|---------|
| Base Volume Input [veh/h] | 1 | 83 | 57 | 80 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 1 | 112 | 77 | 165 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 28 | 19 | 41 |
| Total Analysis Volume [veh/h] | 1 | 112 | 77 | 165 |
| Pedestrian Volume [ped/h] | 9 | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 |
|------------------------------------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 13.55 | 9.25 | 0.00 | 0.00 | 0.00 | 7.71 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.40 | 0.40 | 0.00 | 0.00 | 0.00 | 0.67 | 0.67 |
| 95th-Percentile Queue Length [ft] | 10.06 | 10.06 | 0.00 | 0.00 | 0.00 | 16.72 | 16.72 |
| d, A, Approach Delay [s/veh] | 9.29 | | | | | | |
| Approach LOS | A | | | | | | |
| d, I, Intersection Delay [s/veh] | | | | | 4.97 | | |
| Intersection LOS | | | | | | B | |

Intersection Level Of Service Report
Intersection 9: Alliance Rd/17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 34.4
 Level Of Service: D
 Volume to Capacity (v/c): 0.563

Intersection Setup

| Name | Alliance Rd | Alliance Rd | 17th St |
|------------------------|--------------------|--------------------|---------------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | ← | → | ⇈ |
| Turning Movement | Left 12.00 0 | Thru 12.00 0 | Right 12.00 0 |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 |
| Pocket Length [ft] | 100.00 | 100.00 | 20.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | Yes |

volumes

| Name | Alliance Rd | Alliance Rd | 17th St |
|---|-------------|-------------|---------|
| Base Volume Input [veh/h] | 21 | 321 | 121 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 5 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 28 | 438 | 163 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 7 | 110 | 41 |
| Total Analysis Volume [veh/h] | 28 | 438 | 163 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.568 | 0.05 |
|------------------------------------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 9.04 | 0.00 | 0.00 | 0.00 | 0.00 | 34.42 | 12.14 |
| Movement LOS | A | A | A | A | A | D | B |
| 95th-Percentile Queue Length [veh] | 1.90 | 1.90 | 0.00 | 0.00 | 0.00 | 3.40 | 0.16 |
| 95th-Percentile Queue Length [ft] | 47.48 | 47.48 | 0.00 | 0.00 | 0.00 | 86.02 | 4.01 |
| d, A, Approach Delay [s/veh] | 0.70 | | | | | 31.25 | |
| Approach LOS | A | | | | | D | |
| d, I, Intersection Delay [s/veh] | | | | | 5.06 | | |
| Intersection LOS | | | | | D | | |

Intersection Level Of Service Report
Intersection 10: K S011th St

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 22.8
Level Of Service: C

Intersection Setup

| Name | K St | | Southbound | | K St | | Eastbound | | 11th St | | Westbound | |
|------------------------|------------|--------|------------|--------|--------|--------|-----------|--------|---------|--------|-----------|--------|
| | Northbound | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | | | | | | | | | | | | |
| Lane Configuration | | | | | | | | | | | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

volumes

| Name | K St | | K St | | K St | | 11th St | | 11th St | | 11th St | |
|---|------------|--------|--------|--------|--------|--------|---------|--------|---------|--------|---------|--------|
| | Northbound | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 109 | 143 | 16 | 37 | 182 | 6 | 38 | 153 | 112 | 32 | 73 | 27 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 147 | 194 | 22 | 50 | 251 | 8 | 51 | 207 | 151 | 43 | 99 | 36 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 37 | 49 | 6 | 13 | 63 | 2 | 13 | 52 | 38 | 11 | 25 | 9 |
| Total Analyse Volume [veh/h] | 147 | 194 | 22 | 50 | 251 | 8 | 51 | 207 | 151 | 43 | 99 | 36 |
| Pedestrian Volume [ped/h] | 9 | 9 | | | 9 | | | 6 | 6 | | | 6 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| Left | 5.41 | 135.17 | 24.26 | C | 22.78 | C |
| Thru | 3.95 | 96.67 | 20.14 | C | 22.78 | C |
| Right | 6.55 | 163.82 | 27.00 | D | 22.78 | C |
| Other | 1.67 | 41.80 | 14.70 | B | 22.78 | C |

Intersection Level Of Service Report
Intersection 11: 11th St/Janes Rd

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 13.3
Level Of Service: B
Volume to Capacity (V/C): 0.011

Intersection Setup

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | |
|------------------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | | | | |
|---|---------|---------|----------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| | 11th St | 11th St | 11th St | 11th St | 11th St | 11th St | 11th St | 11th St | | | | |
| Base Volume Input [veh/h] | 2 | 56 | 54 | 63 | 61 | 2 | 4 | 23 | 6 | 52 | 18 | 45 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 3 | 76 | 73 | 85 | 82 | 3 | 5 | 31 | 8 | 70 | 24 | 61 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 19 | 18 | 21 | 21 | 1 | 1 | 8 | 2 | 18 | 6 | 15 |
| Total Analysis Volume [veh/h] | 3 | 76 | 73 | 85 | 82 | 3 | 5 | 31 | 8 | 70 | 24 | 61 |
| Pedestrian Volume [ped/h] | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |



Intersection Settings

| Priority Scheme | Free | Free | Stop | Stop |
|------------------------------------|------|------|------|------|
| Flared Lane | | | Yes | Yes |
| Storage Area [veh] | 0 | 0 | 1 | 1 |
| Two-Stage Gap Acceptance | | | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.14 | 0.05 | 0.07 | |
|------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| d_M, Delay for Movement [s/veh] | 7.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.33 | 12.86 | 9.25 | 13.04 | 9.91 | |
| Movement LOS | A | A | A | A | A | A | B | B | A | B | A | |
| 95th-Percentile Queue Length [veh] | 0.34 | 0.34 | 0.34 | 0.41 | 0.41 | 0.41 | 0.24 | 0.24 | 0.24 | 0.69 | 0.69 | |
| 95th-Percentile Queue Length [ft] | 8.44 | 8.44 | 8.44 | 10.16 | 10.16 | 10.16 | 6.00 | 6.00 | 6.00 | 17.16 | 17.16 | |
| d_A, Approach Delay [s/veh] | 0.15 | | 3.85 | | 11.89 | | 12.25 | | 11.89 | | 11.89 | |
| Approach LOS | A | | A | | B | | B | | B | | B | |
| d_I, Intersection Delay [s/veh] | 5.87 | | 5.87 | | 5.87 | | 5.87 | | 5.87 | | 5.87 | |
| Intersection LOS | B | | B | | B | | B | | B | | B | |



Intersection Level Of Service Report

Intersection 12: James Rd/Foster Ave

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 10.3
 Level Of Service: B
 Volume to Capacity (v/c): 0.007

Intersection Setup

| Name | Foster Ave | James Rd | Foster Ave |
|------------------------|---------------|----------------|---------------|
| Approach | Northbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 | Right 12.00 | Thru 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | No | No | No |
| Crosswalk | | | |

volumes

| Name | Foster Ave | James Rd | Foster Ave |
|---|------------|----------|------------|
| Base Volume Input [veh/h] | 4 | 53 | 3 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 5 | 72 | 4 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 18 | 1 |
| Total Analysis Volume [veh/h] | 5 | 72 | 4 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.07 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|
| d.M. Delay for Movement [s/veh] | 10.27 | 8.63 | 0.00 | 0.00 | 0.00 | 7.39 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.24 | 0.24 | 0.00 | 0.00 | 0.00 | 0.22 | 0.22 |
| 95th-Percentile Queue Length [ft] | 5.99 | 5.99 | 0.00 | 0.00 | 0.00 | 5.39 | 5.39 |
| d.A. Approach Delay [s/veh] | 8.74 | | 0.00 | 0.00 | 0.00 | 6.91 | |
| Approach LOS | A | | A | A | A | A | |
| d.I. Intersection Delay [s/veh] | | | 7.24 | | | | |
| Intersection LOS | | | B | | | | |

Intersection Level Of Service Report
Intersection 13: Foster Ave/ Project Drive

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 9.5
 Level Of Service: A
 Volume to Capacity (v/c): 0.000

Intersection Setup

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|------------------------|------------------|-----------------|------------|
| Approach | Southbound | Eastbound | Westbound |
| Lane Configuration | T | T | T |
| Turning Movement | Left Right | Left Thru Right | Thru Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | Yes | Yes |

volumes

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|---|------------------|------------|------------|
| Base Volume Input [veh/h] | 0 | 0 | 58 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 0 | 78 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 0 | 27 |
| Total Analysis Volume [veh/h] | 0 | 0 | 109 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.49 | 8.81 | 7.43 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | | 9.15 | | | |
| Approach LOS | | A | | | A |
| d, I, Intersection Delay [s/veh] | | | 0.00 | | |
| Intersection LOS | | | A | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.015

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Thru | Right | Left | Right | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | No | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Base Volume Input [veh/h] | 22 | 0 | 21 | 138 | 0 | 10 | 8 | 156 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 8 | 0 | 7 | 47 | 0 | 4 | 3 | 53 |
| Total Analysis Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Pedestrian Volume [ped/h] | 0 | | 0 | | 11 | | 11 | |

Intersection Settings

| Priority Scheme | Stop | Free | Stop | Free |
|------------------------------------|------|------|------|------|
| Flared Lane | Yes | | No | |
| Storage Area [veh] | 1 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.20 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|-------|-------|------|------|------|
| d, M, Delay for Movement [s/veh] | 10.26 | 0.00 | 9.47 | 0.00 | 0.00 | 0.00 | 0.00 | 10.83 | 9.34 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | | A | | A | | A | B | A | | | |
| 95th-Percentile Queue Length [veh] | 0.13 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.81 | 0.81 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 3.35 | 0.00 | 3.35 | 0.00 | 0.00 | 0.00 | 0.00 | 20.28 | 20.28 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 9.88 | | | | | | | | | | | |
| Approach LOS | A | | | | | | | | | | | |
| d, I, Intersection Delay [s/veh] | 5.55 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Intersection 2: L.K. Wood Blvd/US 101 Overpass
 Delay (sec / veh): 13.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.193

Intersection Setup

| Name | LK Wood Blvd | LK Wood Blvd | Eastbound |
|------------------------|-----------------|-----------------|------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Left Thru Right | Left Thru Right | Left Right |
| Turning Movement | Left Thru Right | Left Thru Right | Left Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | 25.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | 129 |
|---|--------------|--------------|--------|
| Base Volume Input [veh/h] | 160 | 83 | 25 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 216 | 126 | 34 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 54 | 32 | 9 |
| Total Analysis Volume [veh/h] | 216 | 126 | 34 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Stop | Free |
|------------------------------------|------|------|------|
| Flared Lane | | Yes | |
| Storage Area [veh] | 0 | 1 | 0 |
| Two-Stage Gap Acceptance | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.19 | 0.04 | 0.02 | 0.00 |
|------------------------------------|------|------|-------|-------|-------|-------|
| d.M. Delay for Movement [s/veh] | 0.00 | 0.00 | 13.89 | 11.06 | 7.86 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.71 | 0.71 | 0.54 | 0.54 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 17.78 | 17.78 | 13.62 | 13.62 |
| d.A. Approach Delay [s/veh] | 0.00 | 0.00 | 13.12 | | 0.95 | |
| Approach LOS | A | A | B | B | A | A |
| d.I. Intersection Delay [s/veh] | | | 2.77 | | | |
| Intersection LOS | | | B | | | |

Intersection Level Of Service Report
Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes
Delay (sec / veh): 91.9
Level Of Service: F

Intersection Setup

| | | | | | |
|------------------------|--------------|--------|--------------|--------|------------|
| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
| Approach | Northbound | | Southbound | | Eastbound |
| Lane Configuration | ← | | ↑ | | ↑↑↑ |
| Turning Movement | Left | Thru | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 60.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 |
| Grade [%] | 0.00 | | 0.00 | | 0.00 |
| Crosswalk | Yes | | No | | No |

volumes

| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
|---|--------------|--------|--------------|--------|------------|
| Base Volume Input [veh/h] | 280 | 155 | 170 | 243 | 307 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 10 | 0 | 0 | 0 | 5 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 368 | 209 | 230 | 328 | 414 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 97 | 52 | 58 | 82 | 104 |
| Total Analysis Volume [veh/h] | 368 | 209 | 230 | 328 | 414 |
| Pedestrian Volume [ped/h] | 147 | | 0 | | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 29.03 | 2.87 | 5.13 | 10.36 | 0.90 |
|------------------------------------|--------|-------|--------|--------|-------|
| 95th-Percentile Queue Length [ft] | 725.65 | 74.34 | 128.28 | 255.93 | 22.60 |
| Approach Delay [s/veh] | 217.18 | 22.81 | | 37.13 | |
| Approach LOS | F | C | | E | |
| Intersection Delay [s/veh] | 91.86 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 361.8
 Level Of Service: F
 Volume to Capacity (V/C): 1.533

Intersection Setup

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|------------------------|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Lane Configuration | TFF | | | | | | TFF | | | TFF | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 25.00 | | | 25.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|---|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 103 | 4 | 254 | 0 | 0 | 0 | 114 | 236 | 0 | 0 | 282 | 241 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 10 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 10 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 149 | 5 | 343 | 0 | 0 | 0 | 156 | 324 | 0 | 0 | 381 | 325 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 37 | 1 | 86 | 0 | 0 | 0 | 39 | 81 | 0 | 0 | 98 | 81 |
| Total Analysis Volume [veh/h] | 149 | 5 | 343 | 0 | 0 | 0 | 156 | 324 | 0 | 0 | 381 | 325 |
| Pedestrian Volume [ped/h] | 146 | | | 0 | | | 0 | | | 0 | | |



Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 1.53 | 0.06 | 0.48 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|------|------|------|-------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 361.81 | 48.89 | 12.06 | 0.00 | 0.00 | 0.00 | 9.94 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 11.38 | 1.22 | 1.08 | 0.00 | 0.00 | 0.00 | 0.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 284.60 | 30.42 | 27.06 | 0.00 | 0.00 | 0.00 | 15.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 117.29 | | | | | | 3.23 | | | | | |
| Approach LOS | F | | | | | | A | | | | | A |
| d_I, Intersection Delay [s/veh] | | | | | | | 35.35 | | | | | F |
| Intersection LOS | | | | | | | | | | | | |



Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop Delay (sec / veh): 13.2
 HCM 2010 Level Of Service: B
 Analysis Method: Level Of Service:
 Analysis Period: 15 minutes

Intersection Setup

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|------------------------|------------|--------|--------|--------------|--------|--------|------------|--------|-------|------------|--------|--------|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Approach | | | | | | | | | | | | |
| Lane Configuration | + | | | | | | | | | | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 30.00 | | | 30.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|---|--------|--------|--------|--------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 75 | 30 | 26 | 149 | 279 | 101 | 67 | 175 | 60 | 111 | 152 | 116 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 6 | 0 | 0 | 0 | 0 | 4 | 5 | 7 | 3 | 0 | 20 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 107 | 41 | 35 | 201 | 377 | 140 | 95 | 243 | 84 | 150 | 225 | 157 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 27 | 10 | 9 | 50 | 94 | 35 | 24 | 61 | 21 | 38 | 56 | 39 |
| Total Analysis Volume [veh/h] | 107 | 41 | 35 | 201 | 377 | 140 | 95 | 243 | 84 | 150 | 225 | 157 |
| Pedestrian Volume [ped/h] | 112 | | | 0 | | | 0 | | | 0 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | 1.11 | | | 1.96 | | | 1.61 | | | 1.61 | | | 1.11 | | |
|-----------------------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| 95th-Percentile Queue Length [ft] | 27.72 | | | 49.06 | 40.28 | 40.28 | 23.31 | 18.05 | 62.54 | 13.01 | 33.14 | 33.14 | 55.79 | 26.58 | 1.14 |
| Approach Delay [s/veh] | 10.39 | | | 13.28 | | | | 13.82 | | | | | 13.71 | | |
| Approach LOS | B | | | B | | | | B | | | | | B | | |
| Intersection Delay [s/veh] | 13.24 | | | | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | | | | |

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset PM Future +Canyon Creek

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 11 | 2.0 | 0.228 | 5.2 | LOS A | 1.1 | 28.7 | 0.39 | 0.25 | 23.0 |
| 8 | T1 | 22 | 2.0 | 0.228 | 5.2 | LOS A | 1.1 | 28.7 | 0.39 | 0.25 | 23.0 |
| 18 | R2 | 230 | 2.0 | 0.228 | 5.2 | LOS A | 1.1 | 28.7 | 0.39 | 0.25 | 22.8 |
| Approach | | 263 | 2.0 | 0.228 | 5.2 | LOS A | 1.1 | 28.7 | 0.39 | 0.25 | 22.8 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 251 | 2.0 | 0.352 | 5.8 | LOS A | 2.2 | 56.0 | 0.18 | 0.06 | 22.6 |
| 6 | T1 | 153 | 2.0 | 0.352 | 5.8 | LOS A | 2.2 | 56.0 | 0.18 | 0.06 | 22.7 |
| 16 | R2 | 75 | 2.0 | 0.352 | 5.8 | LOS A | 2.2 | 56.0 | 0.18 | 0.06 | 22.4 |
| Approach | | 479 | 2.0 | 0.352 | 5.8 | LOS A | 2.2 | 56.0 | 0.18 | 0.06 | 22.6 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 60 | 2.0 | 0.089 | 4.7 | LOS A | 0.4 | 9.4 | 0.49 | 0.39 | 22.8 |
| 4 | T1 | 19 | 2.0 | 0.089 | 4.7 | LOS A | 0.4 | 9.4 | 0.49 | 0.39 | 22.8 |
| 14 | R2 | 3 | 2.0 | 0.089 | 4.7 | LOS A | 0.4 | 9.4 | 0.49 | 0.39 | 22.5 |
| Approach | | 82 | 2.0 | 0.089 | 4.7 | LOS A | 0.4 | 9.4 | 0.49 | 0.39 | 22.8 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| 2 | T1 | 130 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| 12 | R2 | 15 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.0 |
| Approach | | 146 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| All Vehicles | | 970 | 2.0 | 0.352 | 5.4 | LOS A | 2.2 | 56.0 | 0.30 | 0.18 | 22.8 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 70.3
Level Of Service: F

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|-----------|--------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | | | | | |
|---|--------------|------------|-------------|--------|------------|--------|------------|-----------|--------|--------|--------|--------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound | | | | |
| Base Volume Input [veh/h] | 13 | 354 | 113 | 100 | 322 | 6 | 5 | 16 | 12 | 109 | 20 | 124 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 18 | 478 | 159 | 139 | 435 | 8 | 7 | 22 | 16 | 150 | 27 | 169 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 5 | 120 | 40 | 35 | 109 | 2 | 2 | 6 | 4 | 38 | 7 | 42 |
| Total Analysis Volume [veh/h] | 18 | 478 | 159 | 139 | 435 | 8 | 7 | 22 | 16 | 150 | 27 | 169 |
| Pedestrian Volume [ped/h] | 24 | | 18 | | 18 | | 18 | | 10 | | 10 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 21.10 | 16.00 | 0.35 | 1.53 | 1.86 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 527.39 | 399.98 | 8.79 | 38.24 | 46.44 |
| Approach Delay [s/veh] | 102.01 | 71.97 | 12.45 | 14.92 | |
| Approach LOS | F | F | B | B | B |
| Intersection Delay [s/veh] | 70.29 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report
Intersection 8: Q St & 17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.4
 Level Of Service: B
 Volume to Capacity (v/c): 0.006

Intersection Setup

| Name | Q St | | Q St | | 17th St | |
|------------------------|------------|--------|-----------|--------|-----------|--------|
| Approach | Northbound | | Eastbound | | Westbound | |
| Lane Configuration | T | | T | | T | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | |

volumes

| Name | Q St | | Q St | | 17th St | |
|---|--------|--------|--------|--------|---------|--------|
| Base Volume Input [veh/h] | 3 | 37 | 41 | 3 | 56 | 36 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 13 | 14 | 1 | 19 | 12 |
| Total Analysis Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|
| d.M. Delay for Movement [s/veh] | 10.40 | 8.78 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.26 |
| 95th-Percentile Queue Length [ft] | 4.38 | 4.38 | 0.00 | 0.00 | 0.00 | 6.59 |
| d.A. Approach Delay [s/veh] | 8.90 | | 0.00 | 0.00 | 0.00 | 4.53 |
| Approach LOS | A | | A | A | A | A |
| d.I. Intersection Delay [s/veh] | | | 4.40 | | | B |
| Intersection LOS | | | | | | |

Intersection Level Of Service Report
Intersection 9: Alliance Rd/17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 25.6
 Level Of Service: D
 Volume to Capacity (v/c): 0.347

Intersection Setup

| Name | Alliance Rd Northbound | Alliance Rd Southbound | 17th St Eastbound |
|------------------------|------------------------|------------------------|-------------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | ← | → | → |
| Turning Movement | Left Thru Right | Left Thru Right | Left Thru Right |
| Lane Width [ft] | 12.00 12.00 12.00 | 12.00 12.00 12.00 | 12.00 12.00 12.00 |
| No. of Lanes in Pocket | 0 0 0 | 0 0 0 | 0 0 1 |
| Pocket Length [ft] | 100.00 100.00 100.00 | 100.00 100.00 100.00 | 100.00 20.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | Yes |

volumes

| Name | Alliance Rd | Alliance Rd | 17th St |
|---|-------------|-------------|---------|
| Base Volume Input [veh/h] | 18 | 315 | 69 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 6 | 3 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 24 | 465 | 93 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 6 | 107 | 23 |
| Total Analysis Volume [veh/h] | 24 | 465 | 93 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |



Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|-------|------|------|------|------|------|------|------|------|------|------|-------|
| d, M, Delay for Movement [s/veh] | 8.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A | A | A | A | A | A | A | A | B |
| 95th-Percentile Queue Length [veh] | 2.54 | 2.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 |
| 95th-Percentile Queue Length [ft] | 63.60 | 63.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 37.21 |
| d, A, Approach Delay [s/veh] | 0.42 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 23.57 |
| Approach LOS | A | A | A | A | A | A | A | A | A | A | A | A | C |
| d, I, Intersection Delay [s/veh] | | | | | | | | | | | | | 2.44 |
| Intersection LOS | | | | | | | | | | | | | D |



Intersection Level Of Service Report
Intersection 10: K S011th St

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 76.5
Level Of Service: F

Intersection Setup

| Name | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | + | | | + | | | + | | | + | | |
| Lane Configuration | + | | | + | | | + | | | + | | |
| Turning Movement | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| Lane Width [ft] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Crosswalk | Yes | | | Yes | | | Yes | | | Yes | | |

volumes

| Name | K St | | | 11th St | | | 11th St | | | | | |
|---|--------|--------|--------|---------|--------|--------|---------|--------|--------|----|--|--|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | | | |
| Base Volume Input [veh/h] | 96 | 283 | 37 | 54 | 233 | 7 | 21 | 104 | 84 | | | |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | | | |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | | | |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | | | |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Site-Generated Trips [veh/h] | 0 | 6 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | | | |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Total Hourly Volume [veh/h] | 130 | 388 | 50 | 73 | 318 | 9 | 28 | 140 | 113 | | | |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | | | |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | | | |
| Total 15-Minute Volume [veh/h] | 33 | 97 | 13 | 18 | 80 | 2 | 7 | 35 | 28 | | | |
| Total Analyse Volume [veh/h] | 130 | 388 | 50 | 73 | 318 | 9 | 28 | 140 | 113 | | | |
| Pedestrian Volume [ped/h] | 17 | | | 18 | | | 5 | | | 12 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LCS | Intersection Delay [s/veh] | Intersection LOS |
|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| 22.84 | 570.84 | 148.24 | F | 76.48 | F |
| 9.36 | 233.81 | 46.52 | E | 76.48 | F |
| 4.47 | 111.82 | 25.33 | D | 76.48 | F |
| 5.03 | 125.63 | 27.62 | D | 76.48 | F |

Intersection Level Of Service Report
Intersection 11: 11th St/Janes Rd

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 11.6
Level Of Service: B
Volume to Capacity (v/c): 0.002

Intersection Setup

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | |
|------------------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | | | |
|---|---------|--------|----------|--------|---------|--------|---------|--------|--------|--------|----|
| | 4 | 49 | 29 | 24 | 1 | 25 | 7 | 47 | 29 | 58 | |
| Base Volume Input [veh/h] | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | |
| Base Volume Adjustment Factor | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | |
| Heavy Vehicles Percentage [%] | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | |
| Growth Rate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Hourly Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 | 78 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | |
| Total 15-Minute Volume [veh/h] | 1 | 17 | 17 | 10 | 8 | 0 | 9 | 2 | 16 | 10 | 20 |
| Total Analysis Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 | 78 |
| Pedestrian Volume [ped/h] | 4 | | | 3 | | | 3 | | | | 7 |



Intersection Settings

| Priority Scheme | Free | Free | Free | Stop | Stop |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | Yes | Yes |
| Storage Area [veh] | 0 | 0 | 0 | 1 | 1 |
| Two-Stage Gap Acceptance | | | | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | 0.06 | 0.08 |
|------------------------------------|------|------|------|------|-------|-------|-------|------|-------|-------|-------|
| d_M, Delay for Movement [s/veh] | 7.30 | 0.00 | 0.00 | 0.00 | 0.00 | 11.63 | 11.12 | 8.79 | 11.19 | 11.20 | 9.44 |
| Movement LOS | A | A | A | A | A | B | B | A | B | B | A |
| 95th-Percentile Queue Length [veh] | 0.29 | 0.29 | 0.29 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.56 | 0.56 | 0.56 |
| 95th-Percentile Queue Length [ft] | 7.16 | 7.16 | 7.16 | 3.96 | 3.96 | 4.52 | 4.52 | 4.52 | 14.07 | 14.07 | 14.07 |
| d_A, Approach Delay [s/veh] | 0.27 | | 4.11 | | 10.65 | | B | | B | | 10.44 |
| Approach LOS | A | | A | | B | | B | | B | | B |
| d_I, Intersection Delay [s/veh] | | | 6.19 | | B | | | | | | |
| Intersection LOS | | | B | | | | | | | | |



Intersection Level Of Service Report

Intersection 12: James Rd/Foster Ave

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 9.3
 Level Of Service: A
 Volume to Capacity (v/c): 0.017

Intersection Setup

| Name | Foster Ave | James Rd | Foster Ave |
|------------------------|---|---------------------------|------------|
| Approach | Northbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 Right 12.00 Thru 12.00 | Right 12.00 Left 12.00 | Thru 12.00 |
| Lane Width [ft] | 0 0 0 | 0 0 0 | 0 |
| No. of Lanes in Pocket | 100.000 | 100.000 | 100.000 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | No | No | No |
| Crosswalk | | | |

volumes

| Name | Foster Ave | James Rd | Foster Ave |
|---|------------|----------|------------|
| Base Volume Input [veh/h] | 11 | 9 | 10 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 15 | 12 | 14 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 4 | 3 | 4 |
| Total Analysis Volume [veh/h] | 15 | 12 | 14 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.03 | 0.00 | 0.00 | 0.02 | 0.00 |
|------------------------------------|------|------|------|------|------|------|
| d.M. Delay for Movement [s/veh] | 9.32 | 8.57 | 0.00 | 0.00 | 7.30 | 0.00 |
| Movement LOS | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.16 | 0.16 | 0.00 | 0.00 | 0.10 | 0.10 |
| 95th-Percentile Queue Length [ft] | 3.94 | 3.94 | 0.00 | 0.00 | 2.52 | 2.52 |
| d.A. Approach Delay [s/veh] | 8.79 | | 0.00 | 0.00 | 5.34 | |
| Approach LOS | A | | A | A | A | |
| d.I. Intersection Delay [s/veh] | | | 6.08 | | | |
| Intersection LOS | | | A | | | |

Intersection Level Of Service Report

Intersection 13: Foster Avenue/ Creekside Prj Driveway

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 9.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.000

Intersection Setup

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|------------------------|---------------------------|------------|---------------------------|
| Approach | Southbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 Right 12.00 | Thru 12.00 | Thru 12.00 Right 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.000 | 100.000 | 100.000 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes |
| Crosswalk | Yes | Yes | Yes |

volumes

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|---|------------------|------------|------------|
| Base Volume Input [veh/h] | 0 | 0 | 40 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 0 | 54 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 0 | 14 |
| Total Analysis Volume [veh/h] | 0 | 0 | 54 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.03 | 8.54 | 7.31 | 0.00 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 8.79 | | | | | |
| Approach LOS | A | A | A | A | A | A |
| d, I, Intersection Delay [s/veh] | | | | | | |
| Intersection LOS | | | | | | A |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.016

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound |
| Approach | T | | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Right | Thru | Left | Right | Thru | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | No | | Yes | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound |
| Base Volume Input [veh/h] | 5 | 0 | 5 | 184 | 0 | 6 | 8 | 99 | 0 | 0 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 | 0 | 0 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 2 | 0 | 2 | 62 | 0 | 2 | 3 | 34 | 0 | 0 |
| Total Analysis Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 | 0 | 0 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 0 |



Intersection Settings

| Priority Scheme | Stop | Free | Stop | Free |
|------------------------------------|------|------|------|------|
| Flared Lane | Yes | | | |
| Storage Area [veh] | 1 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.13 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|-------|-------|------|------|------|
| d, M, Delay for Movement [s/veh] | 10.57 | 0.00 | 9.70 | 0.00 | 0.00 | 0.00 | 0.00 | 10.88 | 8.97 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A | B | A | | | |
| 95th-Percentile Queue Length [veh] | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.82 | 0.00 | 0.82 | 0.00 | 0.00 | 0.00 | 0.00 | 12.37 | 12.37 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 10.14 | | | | | | | | | | | |
| Approach LOS | B | | | A | | | A | | | A | | |
| d, I, Intersection Delay [s/veh] | 3.53 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |



Intersection Level Of Service Report

Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 17.4
Level Of Service: C

Intersection Setup

| | | | |
|------------------------|--------------|--------------|------------|
| Name | LK Wood Blvd | LK Wood Blvd | Sunset Ave |
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | | | |
| Turning Movement | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | Sunset Ave |
|---|--------------|--------------|------------|
| Base Volume Input [veh/h] | 95 | 183 | 225 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 4 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 132 | 247 | 304 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 33 | 62 | 76 |
| Total Analysis Volume [veh/h] | 132 | 247 | 304 |
| Pedestrian Volume [ped/h] | 75 | 0 | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | Approach | 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|-----------|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| Right | Eastbound | 3.71 | 2.94 | 3.64 | C | 17.39 | C |
| Right | Eastbound | 92.76 | 73.36 | 91.07 | C | 17.39 | C |
| Right | Eastbound | 22.28 | 18.36 | 14.99 | B | 17.39 | C |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 135.9
 Level Of Service: F
 Volume to Capacity (V/C): 0.922

Intersection Setup

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|------------------------|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Lane Configuration | TFF | | | | | | TFF | | | TFF | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 25.00 | | | 25.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|---|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 74 | 0 | 118 | 0 | 0 | 0 | 93 | 430 | 0 | 0 | 251 | 67 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 4 | 0 | 0 | 0 | 0 | 0 | 6 | 14 | 0 | 0 | 4 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 104 | 0 | 159 | 0 | 0 | 0 | 132 | 595 | 0 | 0 | 343 | 90 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 26 | 0 | 40 | 0 | 0 | 0 | 33 | 149 | 0 | 0 | 86 | 23 |
| Total Analysis Volume [veh/h] | 104 | 0 | 159 | 0 | 0 | 0 | 132 | 595 | 0 | 0 | 343 | 90 |
| Pedestrian Volume [ped/h] | 75 | | | 0 | | | 0 | | | 0 | | |



Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.92 | 0.00 | 0.32 | 0.00 | 0.00 | 0.00 | 0.12 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|------|------|------|-------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 135.87 | 36.23 | 13.47 | 0.00 | 0.00 | 0.00 | 8.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 572 | 0.56 | 0.56 | 0.00 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 143.03 | 13.89 | 13.89 | 0.00 | 0.00 | 0.00 | 9.92 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 61.87 | | | | | | 1.56 | | | | | |
| Approach LOS | F | | | A | | | A | | | | | A |
| d_I, Intersection Delay [s/veh] | | | | | | | 12.24 | | | | | |
| Intersection LOS | | | | | | | F | | | | | |



Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop
 HCM 2010
 Analysis Method:
 Analysis Period: 15 minutes
 Delay (sec / veh): 21.0
 Level Of Service: C

Intersection Setup

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|------------------------|------------|--------|--------|--------------|--------|--------|------------|--------|-------|------------|--------|--------|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Approach | | | | | | | | | | | | |
| Lane Configuration | + | | | | | | | | | | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 30.00 | | | 30.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|---|--------|--------|--------|--------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 35 | 7 | 11 | 311 | 391 | 190 | 128 | 201 | 46 | 90 | 123 | 112 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 2 | 0 | 0 | 0 | 0 | 2 | 15 | 20 | 9 | 0 | 8 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 49 | 9 | 15 | 420 | 528 | 259 | 188 | 291 | 71 | 122 | 174 | 151 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 12 | 2 | 4 | 105 | 132 | 65 | 47 | 73 | 18 | 31 | 44 | 38 |
| Total Analysis Volume [veh/h] | 49 | 9 | 15 | 420 | 528 | 259 | 188 | 291 | 71 | 122 | 174 | 151 |
| Pedestrian Volume [ped/h] | 60 | | | 0 | | | 0 | | | 0 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | A | | | C | | | C | | | C | | |
|------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|--|
| | 0.39 | 9.02 | 2.84 | 2.84 | 2.32 | 2.16 | 4.36 | 0.50 | 1.22 | 1.89 | 1.37 | |
| 95th-Percentile Queue Length [ft] | 9.66 | 225.4 | 70.89 | 70.89 | 56.01 | 54.00 | 109.07 | 12.43 | 30.42 | 47.17 | 34.16 | |
| Approach Delay [s/veh] | 9.38 | 24.43 | | | 19.78 | | | 15.16 | | | C | |
| Approach LOS | A | | | C | | | C | | | C | | |
| Intersection Delay [s/veh] | 21.01 | | | | | | C | | | | | |
| Intersection LOS | C | | | | | | C | | | | | |

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset AM Future + Sunset Terrace

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 35 | 2.0 | 0.296 | 6.2 | LOS A | 1.5 | 38.8 | 0.48 | 0.36 | 22.7 |
| 8 | T1 | 1 | 2.0 | 0.296 | 6.2 | LOS A | 1.5 | 38.8 | 0.48 | 0.36 | 22.7 |
| 18 | R2 | 282 | 2.0 | 0.296 | 6.2 | LOS A | 1.5 | 38.8 | 0.48 | 0.36 | 22.5 |
| Approach | | 318 | 2.0 | 0.296 | 6.2 | LOS A | 1.5 | 38.8 | 0.48 | 0.36 | 22.5 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 259 | 2.0 | 0.355 | 5.9 | LOS A | 2.2 | 56.7 | 0.19 | 0.07 | 22.6 |
| 6 | T1 | 216 | 2.0 | 0.355 | 5.9 | LOS A | 2.2 | 56.7 | 0.19 | 0.07 | 22.7 |
| 16 | R2 | 7 | 2.0 | 0.355 | 5.9 | LOS A | 2.2 | 56.7 | 0.19 | 0.07 | 22.4 |
| Approach | | 482 | 2.0 | 0.355 | 5.9 | LOS A | 2.2 | 56.7 | 0.19 | 0.07 | 22.6 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 32 | 2.0 | 0.048 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.7 |
| 4 | T1 | 7 | 2.0 | 0.048 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.8 |
| 14 | R2 | 1 | 2.0 | 0.048 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.5 |
| Approach | | 40 | 2.0 | 0.048 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.7 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.235 | 5.7 | LOS A | 1.1 | 28.9 | 0.48 | 0.37 | 23.0 |
| 2 | T1 | 230 | 2.0 | 0.235 | 5.7 | LOS A | 1.1 | 28.9 | 0.48 | 0.37 | 23.1 |
| 12 | R2 | 14 | 2.0 | 0.235 | 5.7 | LOS A | 1.1 | 28.9 | 0.48 | 0.37 | 22.8 |
| Approach | | 245 | 2.0 | 0.235 | 5.7 | LOS A | 1.1 | 28.9 | 0.48 | 0.37 | 23.0 |
| All Vehicles | | 1085 | 2.0 | 0.355 | 5.9 | LOS A | 2.2 | 56.7 | 0.35 | 0.23 | 22.7 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 40.7
Level Of Service: E

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound |
| Approach | + | | + | | + | | + | |
| Lane Configuration | + | | + | | + | | + | |
| Turning Movement | Left | Thru | Right | Thru | Left | Thru | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | |

volumes

| Name | Alliance Ave | | | Alliance Rd | | | Foster Ave | | | Foster Ave | | |
|---|--------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | 3 | 232 | 116 | 120 | 290 | 3 | 5 | 11 | 8 | 185 | 5 | 65 |
| Base Volume Input [veh/h] | 3 | 232 | 116 | 120 | 290 | 3 | 5 | 11 | 8 | 185 | 5 | 65 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 6 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 313 | 159 | 164 | 392 | 4 | 7 | 15 | 11 | 259 | 7 | 94 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 78 | 40 | 41 | 98 | 1 | 2 | 4 | 3 | 65 | 2 | 24 |
| Total Analysis Volume [veh/h] | 4 | 313 | 159 | 164 | 392 | 4 | 7 | 15 | 11 | 259 | 7 | 94 |
| Pedestrian Volume [ped/h] | 14 | | | 7 | | | 15 | | | 10 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 8.84 | 14.31 | 0.25 | 3.73 | 0.73 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 220.95 | 357.65 | 6.33 | 93.33 | 18.21 |
| Approach Delay [s/veh] | 34.12 | 61.72 | 12.26 | | 19.19 |
| Approach LOS | D | F | B | | C |
| Intersection Delay [s/veh] | 40.67 | | | | |
| Intersection LOS | E | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.015

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Thru | Left | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | No | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Base Volume Input [veh/h] | 22 | 0 | 21 | 138 | 0 | 10 | 8 | 156 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 8 | 0 | 7 | 47 | 0 | 4 | 3 | 53 |
| Total Analysis Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Pedestrian Volume [ped/h] | 0 | | 0 | | 11 | | 11 | |

Intersection Settings

| Priority Scheme | Stop | Free | Stop | Free |
|------------------------------------|------|------|------|------|
| Flared Lane | Yes | | | |
| Storage Area [veh] | 1 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.20 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|-------|-------|------|------|------|
| d_M, Delay for Movement [s/veh] | 10.26 | 0.00 | 9.47 | 0.00 | 0.00 | 0.00 | 0.00 | 10.83 | 9.34 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | | A | | A | | A | B | A | | | |
| 95th-Percentile Queue Length [veh] | 0.13 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.81 | 0.81 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 3.35 | 0.00 | 3.35 | 0.00 | 0.00 | 0.00 | 0.00 | 20.28 | 20.28 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 9.88 | | | | | | | | | | | |
| Approach LOS | A | | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 5.55 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |

Intersection Level of Service Report
Intersection 2: L.K. Wood Blvd/US 101 Overpass
 Two-way stop
 Delay (sec / veh): 13.9
 HCM 2010
 Level of Service: B
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Volume to Capacity (v/c): 0.193

Intersection Setup

| Name | LK Wood Blvd Northbound | LK Wood Blvd Southbound | Eastbound |
|------------------------|-------------------------|-------------------------|---------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Left Thru Right | Left Thru Right | Left Right |
| Turning Movement | Left Thru Right | Left Thru Right | Left Right |
| Lane Width [ft] | 12.00 12.00 12.00 | 12.00 12.00 12.00 | 12.00 12.00 |
| No. of Lanes in Pocket | 0 0 0 | 0 0 0 | 0 0 |
| Pocket Length [ft] | 100.00 100.00 100.00 | 100.00 100.00 100.00 | 100.00 100.00 |
| Speed [mph] | 25.00 | 25.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | LK Wood Blvd | LK Wood Blvd |
|---|--------------|--------------|--------------|--------------|
| Base Volume Input [veh/h] | 160 | 83 | 68 | 25 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 216 | 126 | 92 | 34 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 54 | 32 | 23 | 9 |
| Total Analysis Volume [veh/h] | 216 | 126 | 92 | 34 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Free | Stop | Free |
| Flared Lane | | Yes | |
| Storage Area [veh] | 0 | 1 | 0 |
| Two-Stage Gap Acceptance | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.19 | 0.04 | 0.02 | 0.00 |
|------------------------------------|------|------|-------|-------|-------|-------|
| d.M. Delay for Movement [s/veh] | 0.00 | 0.00 | 13.89 | 11.06 | 7.86 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.71 | 0.71 | 0.54 | 0.54 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 17.78 | 17.78 | 13.62 | 13.62 |
| d.A. Approach Delay [s/veh] | 0.00 | 0.00 | 13.12 | | 0.95 | |
| Approach LOS | A | A | B | | A | |
| d.I. Intersection Delay [s/veh] | | | 2.77 | | | |
| Intersection LOS | | | B | | | |

Intersection Level Of Service Report
Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 94.2
Level Of Service: F

Intersection Setup

| | | | |
|------------------------|--------------|--------------|------------|
| Name | LK Wood Blvd | LK Wood Blvd | Sunset Ave |
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | | | |
| Turning Movement | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | No | No |

volumes

| Name | LK Wood Blvd | | | Sunset Ave |
|---|--------------|--------|--------|------------|
| Base Volume Input [veh/h] | 280 | 155 | 170 | 243 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 16 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 394 | 209 | 230 | 328 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 99 | 52 | 58 | 82 |
| Total Analysis Volume [veh/h] | 394 | 209 | 230 | 328 |
| Pedestrian Volume [ped/h] | 147 | 0 | 0 | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | Approach | 95th-Percentile Queue Length [veh] | 95th-Percentile Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|----------|------------------------------------|-------------------------------|--------------|----------------------------|------------------|
| Left | F | 29.72 | 743.05 | F | 94.25 | F |
| Thru | F | 2.88 | 74.43 | C | 94.25 | F |
| Right | F | 5.14 | 128.49 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |
| Left | F | 2.88 | 74.43 | C | 94.25 | F |
| Thru | F | 5.14 | 128.49 | C | 94.25 | F |
| Right | F | 2.88 | 74.43 | C | 94.25 | F |

Intersection Level Of Service Report
Intersection 4: Sunser Ave/US 101 NB Ramps

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 402.7
Level Of Service: F
Volume to Capacity (V/C): 1.629

Intersection Setup

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|------------------------|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Lane Configuration | TFF | | | | | | TFF | | | TFF | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 25.00 | | | 25.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|---|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 103 | 4 | 254 | 0 | 0 | 0 | 114 | 236 | 0 | 0 | 282 | 241 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 16 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 16 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 155 | 5 | 343 | 0 | 0 | 0 | 157 | 328 | 0 | 0 | 387 | 325 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 39 | 1 | 86 | 0 | 0 | 0 | 39 | 82 | 0 | 0 | 99 | 81 |
| Total Analysis Volume [veh/h] | 155 | 5 | 343 | 0 | 0 | 0 | 157 | 328 | 0 | 0 | 387 | 325 |
| Pedestrian Volume [ped/h] | 146 | | | 0 | | | 0 | | | 0 | | |



Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 1.63 | 0.06 | 0.48 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|-------|------|------|-------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 402.69 | 49.85 | 12.12 | 0.00 | 0.00 | 0.00 | 9.99 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | | | | A | A |
| 95th-Percentile Queue Length [veh] | 12.23 | 1.23 | 1.09 | 0.00 | 0.00 | 0.00 | 0.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 305.76 | 30.75 | 27.31 | 0.00 | 0.00 | 0.00 | 16.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 132.85 | | | 0.00 | | | 3.23 | | | 0.00 | | |
| Approach LOS | F | | | A | | | A | | | A | | |
| d_I, Intersection Delay [s/veh] | 40.00 | | | 40.00 | | | F | | | F | | |
| Intersection LOS | F | | | F | | | F | | | F | | |



Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop Delay (sec / veh): 13.4
 HCM 2010 Level Of Service: B
 Analysis Method: Level Of Service:
 Analysis Period: 15 minutes

Intersection Setup

| Name | G St | | US 101 Ramps | | Sunset Ave | | Sunset Ave | | Sunset Ave | |
|------------------------|------------|------------|--------------|--------|------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Left | Right | Thru | Right | Left | Thru | Right | Westbound |
| Approach | | | | | | | | | | |
| Lane Configuration | | | | | | | | | | |
| Turning Movement | Left | Right | Left | Right | Thru | Right | Left | Thru | Right | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | | No | | No | |

volumes

| Name | G St | | US 101 Ramps | | Sunset Ave | | Sunset Ave | | Sunset Ave | | | |
|---|--------|--------|--------------|--------|------------|--------|------------|--------|------------|--------|--------|--------|
| | Left | Right | Thru | Right | Left | Thru | Right | Left | Thru | Right | | |
| Base Volume Input [veh/h] | 75 | 30 | 26 | 149 | 279 | 101 | 67 | 175 | 60 | 111 | 152 | 116 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 9 | 0 | 0 | 0 | 0 | 6 | 9 | 12 | 5 | 0 | 32 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 110 | 41 | 35 | 201 | 377 | 142 | 99 | 248 | 86 | 150 | 237 | 157 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 28 | 10 | 9 | 50 | 94 | 36 | 25 | 62 | 22 | 38 | 59 | 39 |
| Total Analyse Volume [veh/h] | 110 | 41 | 35 | 201 | 377 | 142 | 99 | 248 | 86 | 150 | 237 | 157 |
| Pedestrian Volume [ped/h] | 112 | | 0 | | 0 | | 0 | | 0 | | 0 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | 1.12 | | 1.98 | | 1.62 | | 0.96 | | 0.76 | | 2.61 | | 0.54 | | 1.33 | | 2.44 | | 1.15 | |
|-----------------------------------|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|
| | 28.02 | | 49.47 | | 40.62 | | 23.94 | | 19.06 | | 65.14 | | 13.43 | | 33.20 | | 61.02 | | 26.66 | |
| 95th-Percentile Queue Length [ft] | 10.35 | | 13.37 | | 14.03 | | 14.00 | | 14.00 | | 14.00 | | 14.00 | | 14.00 | | 14.00 | | 14.00 | |
| Approach Delay [s/veh] | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | |
| Approach LOS | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | |
| Intersection Delay [s/veh] | 13.41 | | 13.41 | | 13.41 | | 13.41 | | 13.41 | | 13.41 | | 13.41 | | 13.41 | | 13.41 | | 13.41 | |
| Intersection LOS | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | |

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset PM Future + Sunset Terrace

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 11 | 2.0 | 0.238 | 5.2 | LOS A | 1.2 | 30.5 | 0.37 | 0.24 | 23.0 |
| 8 | T1 | 12 | 2.0 | 0.238 | 5.2 | LOS A | 1.2 | 30.5 | 0.37 | 0.24 | 23.0 |
| 18 | R2 | 256 | 2.0 | 0.238 | 5.2 | LOS A | 1.2 | 30.5 | 0.37 | 0.24 | 22.7 |
| Approach | | 279 | 2.0 | 0.238 | 5.2 | LOS A | 1.2 | 30.5 | 0.37 | 0.24 | 22.8 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 298 | 2.0 | 0.361 | 5.9 | LOS A | 2.3 | 58.5 | 0.15 | 0.04 | 22.6 |
| 6 | T1 | 153 | 2.0 | 0.361 | 5.9 | LOS A | 2.3 | 58.5 | 0.15 | 0.04 | 22.6 |
| 16 | R2 | 45 | 2.0 | 0.361 | 5.9 | LOS A | 2.3 | 58.5 | 0.15 | 0.04 | 22.4 |
| Approach | | 496 | 2.0 | 0.361 | 5.9 | LOS A | 2.3 | 58.5 | 0.15 | 0.04 | 22.6 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 45 | 2.0 | 0.071 | 4.8 | LOS A | 0.3 | 7.3 | 0.51 | 0.40 | 22.8 |
| 4 | T1 | 14 | 2.0 | 0.071 | 4.8 | LOS A | 0.3 | 7.3 | 0.51 | 0.40 | 22.8 |
| 14 | R2 | 3 | 2.0 | 0.071 | 4.8 | LOS A | 0.3 | 7.3 | 0.51 | 0.40 | 22.5 |
| Approach | | 62 | 2.0 | 0.071 | 4.8 | LOS A | 0.3 | 7.3 | 0.51 | 0.40 | 22.8 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.149 | 5.1 | LOS A | 0.7 | 16.7 | 0.48 | 0.38 | 23.2 |
| 2 | T1 | 130 | 2.0 | 0.149 | 5.1 | LOS A | 0.7 | 16.7 | 0.48 | 0.38 | 23.2 |
| 12 | R2 | 15 | 2.0 | 0.149 | 5.1 | LOS A | 0.7 | 16.7 | 0.48 | 0.38 | 22.9 |
| Approach | | 146 | 2.0 | 0.149 | 5.1 | LOS A | 0.7 | 16.7 | 0.48 | 0.38 | 23.2 |
| All Vehicles | | 983 | 2.0 | 0.361 | 5.5 | LOS A | 2.3 | 58.5 | 0.28 | 0.17 | 22.7 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 71.9
Level Of Service: F

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|-----------|--------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | | | | | |
|---|--------------|------------|-------------|--------|------------|--------|------------|-----------|--------|--------|--------|--------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound | | | | |
| Base Volume Input [veh/h] | 13 | 354 | 113 | 100 | 322 | 6 | 5 | 16 | 12 | 109 | 20 | 124 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 18 | 478 | 162 | 141 | 435 | 8 | 7 | 22 | 16 | 152 | 27 | 170 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 5 | 120 | 41 | 35 | 109 | 2 | 2 | 6 | 4 | 38 | 7 | 43 |
| Total Analysis Volume [veh/h] | 18 | 478 | 162 | 141 | 435 | 8 | 7 | 22 | 16 | 152 | 27 | 170 |
| Pedestrian Volume [ped/h] | 24 | | 18 | | 18 | | 18 | | 10 | | 10 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 21.45 | 16.24 | 0.35 | 1.56 | 1.87 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 536.21 | 405.69 | 8.61 | 38.89 | 46.61 |
| Approach Delay [s/veh] | 104.53 | 73.63 | 12.46 | 14.98 | |
| Approach LOS | F | F | B | B | B |
| Intersection Delay [s/veh] | 71.87 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.016

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Thru | Left | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | Yes | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | St Louis Rd | US 101 Overpass | St Louis Rd | US 101 Overpass | St Louis Rd | US 101 Overpass | St Louis Rd | US 101 Overpass |
| Base Volume Input [veh/h] | 5 | 0 | 184 | 0 | 6 | 8 | 99 | 0 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 7 | 0 | 248 | 0 | 8 | 11 | 134 | 0 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 2 | 0 | 62 | 0 | 2 | 3 | 34 | 0 |
| Total Analysis Volume [veh/h] | 7 | 0 | 248 | 0 | 8 | 11 | 134 | 0 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | Yes | | |
| Storage Area [veh] | 1 | 0 | 0 |
| Two-Stage Gap Acceptance | No | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.13 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|-------|-------|------|------|------|
| d_M, Delay for Movement [s/veh] | 10.57 | 0.00 | 9.70 | 0.00 | 0.00 | 0.00 | 0.00 | 10.88 | 8.97 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A | B | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.82 | 0.00 | 0.82 | 0.00 | 0.00 | 0.00 | 0.00 | 12.37 | 12.37 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 10.14 | | | | | | | | | | | |
| Approach LOS | B | | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 3.53 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |

Intersection Level Of Service Report

Intersection 2: L.K. Wood Blvd/US 101 Overpass

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 13.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.222

Intersection Setup

| Name | LK Wood Blvd Northbound | LK Wood Blvd Southbound | Eastbound |
|------------------------|-------------------------|-------------------------|-----------------|
| Approach | ← | → | → |
| Lane Configuration | Thru | Thru | Left Right |
| Turning Movement | Left 12.00 0 | Right 12.00 0 | Left 12.00 0 |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | 25.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | 8 | 181 |
|---|--------------|--------------|--------|--------|
| Base Volume Input [veh/h] | 87 | 27 | 89 | 19 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 117 | 36 | 120 | 26 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 29 | 9 | 30 | 7 |
| Total Analysis Volume [veh/h] | 117 | 36 | 120 | 26 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Stop | Free |
|------------------------------------|------|------|------|
| Flared Lane | | Yes | |
| Storage Area [veh] | 0 | 1 | 0 |
| Two-Stage Gap Acceptance | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.22 | 0.03 | 0.01 | 0.00 |
|------------------------------------|------|------|-------|-------|-------|-------|
| d, M, Delay for Movement [s/veh] | 0.00 | 0.00 | 13.23 | 10.50 | 7.50 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.85 | 0.85 | 0.64 | 0.64 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 21.16 | 21.16 | 15.94 | 15.94 |
| d, A, Approach Delay [s/veh] | 0.00 | 0.00 | 12.74 | | 0.32 | |
| Approach LOS | A | A | B | | A | |
| d, I, Intersection Delay [s/veh] | | | 3.51 | | | |
| Intersection LOS | | | B | | | |

Intersection Level Of Service Report

Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 17.2
 Level Of Service: C

Intersection Setup

| | | | | | |
|------------------------|--------------|--------|--------------|--------|------------|
| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
| Approach | Northbound | | Southbound | | Eastbound |
| Lane Configuration | ← | | ↑ | | ↑↑↑ |
| Turning Movement | Left | Thru | Right | Right | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 60.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 |
| Grade [%] | 0.00 | | 0.00 | | 0.00 |
| Crosswalk | Yes | | No | | No |

volumes

| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
|---|--------------|--------|--------------|--------|------------|
| Base Volume Input [veh/h] | 95 | 183 | 225 | 158 | 382 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 3 | 0 | 0 | 0 | 1 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 131 | 128 | 247 | 304 | 213 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 33 | 32 | 62 | 76 | 53 |
| Total Analysis Volume [veh/h] | 131 | 128 | 247 | 304 | 213 |
| Pedestrian Volume [ped/h] | 75 | 0 | 0 | 213 | 530 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | Approach | 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|------------|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| Right | Eastbound | 3.65 | 2.91 | 3.61 | 2.24 | 2.43 | 2.43 |
| Right | Southbound | 91.32 | 72.78 | 90.19 | 55.10 | 60.76 | 60.76 |
| Right | Northbound | 21.99 | 18.20 | 18.20 | 14.79 | 14.79 | 14.79 |
| | C | | | | | | B |
| | C | | | | | | C |
| | C | | | | | | C |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 134.6
 Level Of Service: F
 Volume to Capacity (V/C): 0.931

Intersection Setup

| Name | US 101 NB On-Ramp | | US 101 NB Off-Ramp | | Sunset Ave Eastbound | | Sunset Ave Westbound | |
|------------------------|-------------------|------------|--------------------|--------|----------------------|--------|----------------------|--------|
| | Northbound | Southbound | Left | Right | Left | Right | Left | Right |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Left | Right | Left | Right | Left | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 25.00 | | 25.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | | No | |

volumes

| Name | US 101 NB On-Ramp | | US 101 NB Off-Ramp | | Sunset Ave Eastbound | | Sunset Ave Westbound | |
|---|-------------------|--------|--------------------|--------|----------------------|--------|----------------------|--------|
| | Left | Right | Left | Right | Left | Right | Left | Right |
| Base Volume Input [veh/h] | 74 | 0 | 0 | 0 | 93 | 430 | 0 | 251 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 9 | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 109 | 0 | 0 | 0 | 128 | 582 | 0 | 342 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 27 | 0 | 0 | 0 | 32 | 146 | 0 | 86 |
| Total Analysis Volume [veh/h] | 109 | 0 | 0 | 0 | 128 | 582 | 0 | 342 |
| Pedestrian Volume [ped/h] | 75 | | 0 | | 0 | | 0 | |

Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.83 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 | 0.11 | 0.01 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|------|------|------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 134.61 | 35.16 | 13.30 | 0.00 | 0.00 | 0.00 | 8.60 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 5.90 | 0.54 | 0.54 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 147.62 | 13.62 | 13.62 | 0.00 | 0.00 | 0.00 | 9.57 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 62.64 | | | | | | | | | | |
| Approach LOS | F | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 12.69 | | | | | | | | | | |
| Intersection LOS | F | | | | | | | | | | |

Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop Delay (sec / veh): 20.5
 HCM 2010 Level Of Service: C
 Analysis Method: 15 minutes
 Analysis Period:

Intersection Setup

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|------------------------|------------|--------|--------|--------------|--------|--------|------------|--------|-------|------------|--------|--------|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Approach | | | | | | | | | | | | |
| Lane Configuration | + | | | TTL | | | TTL | | | TTL | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 30.00 | | | 30.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|---|------------|--------|--------|--------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Base Volume Input [veh/h] | 35 | 7 | 11 | 311 | 391 | 190 | 128 | 201 | 46 | 90 | 123 | 112 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 14 | 0 | 0 | 0 | 0 | 6 | 2 | 3 | 3 | 0 | 12 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 61 | 9 | 15 | 420 | 528 | 263 | 175 | 274 | 65 | 122 | 178 | 151 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 15 | 2 | 4 | 105 | 132 | 66 | 44 | 69 | 16 | 31 | 45 | 38 |
| Total Analysis Volume [veh/h] | 61 | 9 | 15 | 420 | 528 | 263 | 175 | 274 | 65 | 122 | 178 | 151 |
| Pedestrian Volume [ped/h] | 60 | | | 0 | | | 0 | | | 0 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | A | | | C | | | C | | | C | | |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | 0.46 | 8.92 | 2.81 | 2.36 | 1.93 | 3.86 | 0.45 | 1.20 | 1.93 | 1.35 | 1.35 | |
| 95th-Percentile Queue Length [ft] | 11.59 | 223.0 | 70.26 | 70.26 | 56.97 | 48.19 | 96.42 | 11.23 | 30.07 | 48.19 | 33.69 | |
| Approach Delay [s/veh] | 9.59 | 24.10 | | | | | 18.65 | | | 15.07 | | |
| Approach LOS | A | | | | | | C | | | C | | |
| Intersection Delay [s/veh] | | | | 20.51 | | | | | | | | |
| Intersection LOS | | | | C | | | | | | | | |

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset AM Future + Open Door

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 35 | 2.0 | 0.263 | 5.9 | LOS A | 1.3 | 33.3 | 0.46 | 0.34 | 22.8 |
| 8 | T1 | 1 | 2.0 | 0.263 | 5.9 | LOS A | 1.3 | 33.3 | 0.46 | 0.34 | 22.8 |
| 18 | R2 | 246 | 2.0 | 0.263 | 5.9 | LOS A | 1.3 | 33.3 | 0.46 | 0.34 | 22.5 |
| Approach | | 282 | 2.0 | 0.263 | 5.9 | LOS A | 1.3 | 33.3 | 0.46 | 0.34 | 22.6 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 279 | 2.0 | 0.370 | 6.1 | LOS A | 2.4 | 60.3 | 0.19 | 0.07 | 22.6 |
| 6 | T1 | 216 | 2.0 | 0.370 | 6.1 | LOS A | 2.4 | 60.3 | 0.19 | 0.07 | 22.6 |
| 16 | R2 | 7 | 2.0 | 0.370 | 6.1 | LOS A | 2.4 | 60.3 | 0.19 | 0.07 | 22.4 |
| Approach | | 502 | 2.0 | 0.370 | 6.1 | LOS A | 2.4 | 60.3 | 0.19 | 0.07 | 22.6 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 32 | 2.0 | 0.049 | 4.8 | LOS A | 0.2 | 4.9 | 0.53 | 0.43 | 22.7 |
| 4 | T1 | 7 | 2.0 | 0.049 | 4.8 | LOS A | 0.2 | 4.9 | 0.53 | 0.43 | 22.7 |
| 14 | R2 | 1 | 2.0 | 0.049 | 4.8 | LOS A | 0.2 | 4.9 | 0.53 | 0.43 | 22.5 |
| Approach | | 40 | 2.0 | 0.049 | 4.8 | LOS A | 0.2 | 4.9 | 0.53 | 0.43 | 22.7 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 23.0 |
| 2 | T1 | 230 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 23.0 |
| 12 | R2 | 14 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 22.8 |
| Approach | | 245 | 2.0 | 0.240 | 5.8 | LOS A | 1.2 | 29.4 | 0.49 | 0.39 | 23.0 |
| All Vehicles | | 1069 | 2.0 | 0.370 | 5.9 | LOS A | 2.4 | 60.3 | 0.34 | 0.23 | 22.7 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 40.9
Level Of Service: E

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound |
| Approach | + | | + | | + | | + | |
| Lane Configuration | + | | + | | + | | + | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | |

volumes

| Name | Alliance Ave | | | Alliance Rd | | | Foster Ave | | | Foster Ave | | |
|---|--------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | 3 | 232 | 116 | 120 | 290 | 3 | 5 | 11 | 8 | 185 | 5 | 65 |
| Base Volume Input [veh/h] | 3 | 232 | 116 | 120 | 290 | 3 | 5 | 11 | 8 | 185 | 5 | 65 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 14 | 9 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 313 | 171 | 171 | 392 | 4 | 7 | 15 | 11 | 254 | 7 | 90 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 78 | 43 | 43 | 98 | 1 | 2 | 4 | 3 | 64 | 2 | 23 |
| Total Analysis Volume [veh/h] | 4 | 313 | 171 | 171 | 392 | 4 | 7 | 15 | 11 | 254 | 7 | 90 |
| Pedestrian Volume [ped/h] | 14 | | | 7 | | | 15 | | | 10 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | Approach | Queue Length [ft] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|----------|-------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| Left | D | 8.88 | 14.62 | 0.24 | B | 40.89 | E |
| Thru | D | 221.95 | 365.50 | 6.12 | B | 40.89 | E |
| Right | D | 33.32 | 63.11 | 11.95 | B | 40.89 | E |
| Left | F | 8.88 | 14.62 | 0.24 | B | 40.89 | E |
| Thru | F | 221.95 | 365.50 | 6.12 | B | 40.89 | E |
| Right | F | 33.32 | 63.11 | 11.95 | B | 40.89 | E |
| Left | D | 8.88 | 14.62 | 0.24 | B | 40.89 | E |
| Thru | D | 221.95 | 365.50 | 6.12 | B | 40.89 | E |
| Right | D | 33.32 | 63.11 | 11.95 | B | 40.89 | E |
| Left | F | 8.88 | 14.62 | 0.24 | B | 40.89 | E |
| Thru | F | 221.95 | 365.50 | 6.12 | B | 40.89 | E |
| Right | F | 33.32 | 63.11 | 11.95 | B | 40.89 | E |
| Left | D | 8.88 | 14.62 | 0.24 | B | 40.89 | E |
| Thru | D | 221.95 | 365.50 | 6.12 | B | 40.89 | E |
| Right | D | 33.32 | 63.11 | 11.95 | B | 40.89 | E |
| Left | F | 8.88 | 14.62 | 0.24 | B | 40.89 | E |
| Thru | F | 221.95 | 365.50 | 6.12 | B | 40.89 | E |
| Right | F | 33.32 | 63.11 | 11.95 | B | 40.89 | E |

Intersection Level Of Service Report
Intersection 8: Q St & 17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 13.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.002

Intersection Setup

| Name | Q St | | Q St | | 17th St | |
|------------------------|------------|-----------|-----------|------------|------------|-----------|
| Approach | Northbound | Eastbound | Westbound | Southbound | Northbound | Eastbound |
| Lane Configuration | T | | T | | T | |
| Turning Movement | Left | Right | Thru | Left | Right | Thru |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | No | No | No | No | No |

volumes

| Name | Q St | | Q St | | 17th St | |
|---|--------|--------|--------|--------|---------|--------|
| Base Volume Input [veh/h] | 1 | 83 | 57 | 3 | 122 | 80 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 1 | 112 | 77 | 4 | 165 | 108 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 28 | 19 | 1 | 41 | 27 |
| Total Analysis Volume [veh/h] | 1 | 112 | 77 | 4 | 165 | 108 |
| Pedestrian Volume [ped/h] | 9 | 0 | 0 | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 |
|------------------------------------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 13.55 | 9.25 | 0.00 | 0.00 | 0.00 | 7.71 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.40 | 0.40 | 0.00 | 0.00 | 0.00 | 0.67 | 0.67 |
| 95th-Percentile Queue Length [ft] | 10.06 | 10.06 | 0.00 | 0.00 | 0.00 | 16.72 | 16.72 |
| d, A, Approach Delay [s/veh] | 9.29 | | | | | | |
| Approach LOS | A | | | | | A | A |
| d, I, Intersection Delay [s/veh] | | | | | 4.97 | | |
| Intersection LOS | | | | | | B | |

Intersection Level Of Service Report
Intersection 9: Alliance Rd/17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 35.5
 Level Of Service: E
 Volume to Capacity (v/c): 0.593

Intersection Setup

| Name | Alliance Rd | Alliance Rd | 17th St |
|------------------------|----------------------|----------------------|-------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | ← | → | → |
| Turning Movement | Left Thru Right | Left Thru Right | Left Right |
| Lane Width [ft] | 12.00 12.00 12.00 | 12.00 12.00 12.00 | 12.00 12.00 |
| No. of Lanes in Pocket | 0 0 0 | 0 0 0 | 0 1 |
| Pocket Length [ft] | 100.00 100.00 100.00 | 100.00 100.00 100.00 | 20.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | Yes |

volumes

| Name | Alliance Rd | Alliance Rd | 17th St |
|---|-------------|-------------|---------|
| Base Volume Input [veh/h] | 21 | 247 | 321 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 14 | 4 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 28 | 347 | 437 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 7 | 87 | 109 |
| Total Analysis Volume [veh/h] | 28 | 347 | 437 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.59 | 0.05 |
|------------------------------------|-------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 9.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 36.51 | 12.13 |
| Movement LOS | A | A | A | A | A | A | E | B |
| 95th-Percentile Queue Length [veh] | 2.01 | 2.01 | 2.01 | 0.00 | 0.00 | 0.00 | 3.50 | 0.16 |
| 95th-Percentile Queue Length [ft] | 50.18 | 50.18 | 50.18 | 0.00 | 0.00 | 0.00 | 87.38 | 4.00 |
| d, A, Approach Delay [s/veh] | 0.67 | | | | | | | |
| Approach LOS | A | A | A | A | A | A | D | D |
| d, I, Intersection Delay [s/veh] | | | | | | 5.15 | | |
| Intersection LOS | | | | | | E | | |

Intersection Level Of Service Report
Intersection 10: K 5011th St

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 23.7
Level Of Service: C

Intersection Setup

| Name | K St | | K St | | K St | | 11th St | | 11th St | |
|------------------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Northbound | Southbound | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound |
| Approach | + | | + | | + | | + | | + | |
| Lane Configuration | + | | + | | + | | + | | + | |
| Turning Movement | Left | Right | Left | Right | Left | Right | Left | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | Yes | |

volumes

| Name | K St | | K St | | K St | | 11th St | | 11th St | |
|---|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Northbound | Southbound | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound |
| Base Volume Input [veh/h] | 109 | 143 | 16 | 37 | 182 | 6 | 38 | 153 | 112 | 73 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 14 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 147 | 207 | 22 | 50 | 250 | 8 | 51 | 207 | 151 | 43 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 37 | 52 | 6 | 13 | 63 | 2 | 13 | 52 | 38 | 11 |
| Total Analyse Volume [veh/h] | 147 | 207 | 22 | 50 | 250 | 8 | 51 | 207 | 151 | 43 |
| Pedestrian Volume [ped/h] | 9 | | 9 | | 9 | | 6 | | 6 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| Thru | 5.92 | 148.09 | 26.07 | D | 23.70 | C |
| Left | 4.00 | 99.86 | 20.45 | C | 23.70 | C |
| Right | 6.70 | 167.58 | 27.79 | D | 23.70 | C |

Intersection Level Of Service Report
Intersection 11: 11th St/Janes Rd

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 13.3
Level Of Service: B
Volume to Capacity (V/C): 0.011

Intersection Setup

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | |
|------------------------|------------|------------|-----------|-----------|---------|--------|---------|--------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Left | Right | Left | Right | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | | | | |
|---|---------|--------|----------|--------|---------|--------|---------|--------|--------|--------|--------|--------|
| | Left | Right | Left | Right | Left | Right | Left | Right | | | | |
| Base Volume Input [veh/h] | 2 | 56 | 54 | 63 | 61 | 2 | 4 | 23 | 6 | 52 | 18 | 45 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 3 | 76 | 73 | 85 | 82 | 3 | 5 | 31 | 8 | 70 | 24 | 61 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 19 | 18 | 21 | 21 | 1 | 1 | 8 | 2 | 18 | 6 | 15 |
| Total Analysis Volume [veh/h] | 3 | 76 | 73 | 85 | 82 | 3 | 5 | 31 | 8 | 70 | 24 | 61 |
| Pedestrian Volume [ped/h] | 5 | | 5 | | 4 | | 4 | | | | | |

Intersection Settings

| Priority Scheme | Free | Free | Stop | Stop |
|------------------------------------|------|------|------|------|
| Flared Lane | | | Yes | Yes |
| Storage Area [veh] | 0 | 0 | 1 | 1 |
| Two-Stage Gap Acceptance | | | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.14 | 0.05 | 0.07 |
|------------------------------------|------|------|------|-------|-------|-------|-------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 7.40 | 0.00 | 0.00 | 0.00 | 0.00 | 13.33 | 12.86 | 9.25 | 13.04 | 9.91 |
| Movement LOS | A | A | A | A | A | B | B | A | B | A |
| 95th-Percentile Queue Length [veh] | 0.34 | 0.34 | 0.34 | 0.41 | 0.41 | 0.24 | 0.24 | 0.24 | 0.69 | 0.69 |
| 95th-Percentile Queue Length [ft] | 8.44 | 8.44 | 8.44 | 10.16 | 10.16 | 6.00 | 6.00 | 6.00 | 17.16 | 17.16 |
| d, A, Approach Delay [s/veh] | 0.15 | | 3.85 | | A | | B | | 11.89 | |
| Approach LOS | A | | A | | A | | B | | B | |
| d, I, Intersection Delay [s/veh] | 5.87 | | 5.87 | | B | | B | | B | |
| Intersection LOS | B | | B | | B | | B | | B | |

Intersection Level Of Service Report

Intersection 12: James Rd/Foster Ave

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 10.3
 Level Of Service: B
 Volume to Capacity (v/c): 0.007

Intersection Setup

| Name | Foster Ave | James Rd | Foster Ave |
|------------------------|---------------|----------------|---------------|
| Approach | Northbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 | Right 12.00 | Thru 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | No | No | No |
| Crosswalk | | | |

volumes

| Name | Foster Ave | James Rd | Foster Ave |
|---|------------|----------|------------|
| Base Volume Input [veh/h] | 4 | 53 | 3 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 5 | 72 | 4 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 18 | 1 |
| Total Analysis Volume [veh/h] | 5 | 72 | 4 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.07 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 10.27 | 8.63 | 0.00 | 0.00 | 0.00 | 7.39 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.24 | 0.24 | 0.00 | 0.00 | 0.00 | 0.22 | 0.22 |
| 95th-Percentile Queue Length [ft] | 5.99 | 5.99 | 0.00 | 0.00 | 0.00 | 5.39 | 5.39 |
| d, A, Approach Delay [s/veh] | 8.74 | | | | | | |
| Approach LOS | A | | | | | | |
| d, I, Intersection Delay [s/veh] | | | | | 7.24 | | |
| Intersection LOS | | | | | B | | |

Intersection Level Of Service Report
Intersection 13: Foster Ave/ Project Drive

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes
Delay (sec / veh): 9.5
Level Of Service: A
Volume to Capacity (v/c): 0.000

Intersection Setup

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|------------------------|------------------|----------------------|------------|
| Approach | Southbound | Eastbound | Westbound |
| Lane Configuration | T | T | T |
| Turning Movement | Left Right | Thru Left Thru Right | Thru Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | Yes | Yes |

volumes

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|---|------------------|------------|------------|
| Base Volume Input [veh/h] | 0 | 0 | 58 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 0 | 78 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 0 | 27 |
| Total Analysis Volume [veh/h] | 0 | 0 | 109 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.49 | 8.81 | 7.43 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 9.15 | | 0.00 | 0.00 | 0.00 |
| Approach LOS | A | A | A | A | A |
| d, I, Intersection Delay [s/veh] | | | 0.00 | | A |
| Intersection LOS | | | A | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.015

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Thru | Left | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | No | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Base Volume Input [veh/h] | 22 | 0 | 21 | 138 | 0 | 10 | 8 | 156 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 8 | 0 | 7 | 47 | 0 | 4 | 3 | 53 |
| Total Analysis Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Pedestrian Volume [ped/h] | 0 | | 0 | | 11 | | 11 | |

Intersection Settings

| | | | | |
|------------------------------------|------|------|------|------|
| Priority Scheme | Stop | Free | Free | Free |
| Flared Lane | Yes | | | |
| Storage Area [veh] | 1 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.20 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|-------|-------|------|------|------|
| d_M, Delay for Movement [s/veh] | 10.26 | 0.00 | 9.47 | 0.00 | 0.00 | 0.00 | 0.00 | 10.83 | 9.34 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | | A | | A | | A | B | A | | | |
| 95th-Percentile Queue Length [veh] | 0.13 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.81 | 0.81 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 3.35 | 0.00 | 3.35 | 0.00 | 0.00 | 0.00 | 0.00 | 20.28 | 20.28 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 9.88 | | | | | | | | | | | |
| Approach LOS | A | | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 5.55 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 13.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.193

Intersection Setup

| | | |
|------------------------|----------------------|----------------------|
| Name | LK Wood Blvd | |
| Approach | Northbound | Southbound |
| Lane Configuration | Left Thru Right | Left Thru Right |
| Turning Movement | Left Thru Right | Left Thru Right |
| Lane Width [ft] | 12.00 12.00 12.00 | 12.00 12.00 12.00 |
| No. of Lanes in Pocket | 0 0 0 | 0 0 0 |
| Pocket Length [ft] | 100.00 100.00 100.00 | 100.00 100.00 100.00 |
| Speed [mph] | 25.00 | 25.00 |
| Grade [%] | 0.00 | 0.00 |
| Crosswalk | No | No |

Intersection Settings

| | | |
|------------------------------------|------|------|
| Priority Scheme | Free | Free |
| Flared Lane | | |
| Storage Area [veh] | 0 | 0 |
| Two-Stage Gap Acceptance | | |
| Number of Storage Spaces in Median | 0 | 0 |

Movement, Approach, & Intersection Results

| | | | | | | |
|------------------------------------|------|------|-------|-------|-------|-------|
| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.19 | 0.04 | 0.02 | 0.00 |
| d, M, Delay for Movement [s/veh] | 0.00 | 0.00 | 13.89 | 11.06 | 7.86 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.71 | 0.71 | 0.54 | 0.54 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 17.78 | 17.78 | 13.62 | 13.62 |
| d, A, Approach Delay [s/veh] | 0.00 | 0.00 | 13.12 | | | 0.95 |
| Approach LOS | A | A | B | | | A |
| d, I, Intersection Delay [s/veh] | | | 2.77 | | | B |
| Intersection LOS | | | | | | B |

volumes

| | | |
|---|--------------|--------|
| Name | LK Wood Blvd | |
| Base Volume Input [veh/h] | 160 | 83 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 |
| Total Hourly Volume [veh/h] | 216 | 126 |
| Peak Hour Factor | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 54 | 32 |
| Total Analysis Volume [veh/h] | 216 | 126 |
| Pedestrian Volume [ped/h] | 0 | 0 |

volumes

| | | |
|---|--------------|--------|
| Name | LK Wood Blvd | |
| Base Volume Input [veh/h] | 160 | 83 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 |
| Total Hourly Volume [veh/h] | 216 | 126 |
| Peak Hour Factor | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 54 | 32 |
| Total Analysis Volume [veh/h] | 216 | 126 |
| Pedestrian Volume [ped/h] | 0 | 0 |



Intersection Level Of Service Report

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 348.0
Level Of Service: F
Volume to Capacity (V/C): 1.496

Intersection Setup

| Name | US 101 NB On-Ramp | | US 101 NB Off-Ramp | | Sunset Ave Eastbound | | Sunset Ave Westbound | |
|------------------------|-------------------|--------|--------------------|--------|----------------------|--------|----------------------|--------|
| | Left | Right | Left | Right | Left | Right | Left | Right |
| Approach | Northbound | | Southbound | | Eastbound | | Westbound | |
| Lane Configuration | TFF | | | | TF | | T | |
| Turning Movement | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 25.00 | | 25.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | | No | |

volumes

| Name | US 101 NB On-Ramp | | US 101 NB Off-Ramp | | Sunset Ave Eastbound | | Sunset Ave Westbound | |
|---|-------------------|--------|--------------------|--------|----------------------|--------|----------------------|--------|
| | Left | Right | Left | Right | Left | Right | Left | Right |
| Base Volume Input [veh/h] | 103 | 4 | 254 | 0 | 0 | 0 | 114 | 236 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 5 | 0 | 0 | 0 | 0 | 8 | 4 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 144 | 5 | 343 | 0 | 0 | 162 | 323 | 0 |
| Total Hourly Volume [veh/h] | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 36 | 1 | 86 | 0 | 0 | 41 | 81 | 0 |
| Total Analysis Volume [veh/h] | 144 | 5 | 343 | 0 | 0 | 162 | 323 | 0 |
| Pedestrian Volume [ped/h] | 146 | | 0 | | 0 | | 0 | |

Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 1.50 | 0.06 | 0.48 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|------|------|------|-------|------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 346.04 | 49.45 | 12.06 | 0.00 | 0.00 | 0.00 | 9.94 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | | | | | | A |
| 95th-Percentile Queue Length [veh] | 10.92 | 1.22 | 1.08 | 0.00 | 0.00 | 0.00 | 0.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 272.89 | 30.47 | 27.07 | 0.00 | 0.00 | 0.00 | 16.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 110.78 | | | | | | | | | | | | |
| Approach LOS | F | | | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 33.30 | | | | | | | | | | | | |
| Intersection LOS | F | | | | | | | | | | | | |

Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop
 HCM 2010
 Analysis Method:
 Analysis Period: 15 minutes
 Delay (sec / veh): 13.1
 Level Of Service: B

Intersection Setup

| Name | G St | | US 101 Ramps | | Sunset Ave | | Sunset Ave | | Sunset Ave | |
|------------------------|------------|------------|--------------|--------|------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Left | Right | Thru | Right | Left | Thru | Right | Westbound |
| Approach | | | | | | | | | | |
| Lane Configuration | + | + | + | + | + | + | + | + | + | + |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | No | No | No | No | No | No | No | No | No |

volumes

| Name | G St | | US 101 Ramps | | Sunset Ave | | Sunset Ave | | Sunset Ave | |
|---|------------|------------|--------------|--------|------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Left | Right | Thru | Right | Left | Thru | Right | Westbound |
| Base Volume Input [veh/h] | 75 | 30 | 26 | 149 | 279 | 101 | 67 | 175 | 60 | 111 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 8 | 0 | 0 | 0 | 0 | 3 | 12 | 12 | 18 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 109 | 41 | 35 | 201 | 377 | 139 | 102 | 248 | 99 | 150 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 27 | 10 | 9 | 50 | 94 | 35 | 26 | 62 | 25 | 38 |
| Total Analyse Volume [veh/h] | 109 | 41 | 35 | 201 | 377 | 139 | 102 | 248 | 99 | 150 |
| Pedestrian Volume [ped/h] | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | 1.08 | | 1.96 | | 1.61 | | 1.61 | | 0.92 | | 0.79 | | 2.58 | | 0.63 | | 1.32 | | 2.02 | | 1.14 | |
|-----------------------------------|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|
| | 27.08 | | 49.04 | | 40.27 | | 40.27 | | 23.09 | | 19.63 | | 64.44 | | 15.73 | | 32.97 | | 50.40 | | 26.46 | |
| 95th-Percentile Queue Length [ft] | 10.14 | | 13.28 | | 13.28 | | 13.28 | | 13.28 | | 13.86 | | 13.86 | | 13.86 | | 13.86 | | 13.40 | | 13.40 | |
| Approach Delay [s/veh] | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | |
| Approach LOS | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | |
| Intersection Delay [s/veh] | 13.14 | | | | | | | | | | | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | | | | | | | | | | | |

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset PM Future + Open Door

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 11 | 2.0 | 0.252 | 5.4 | LOS A | 1.3 | 32.7 | 0.38 | 0.24 | 22.9 |
| 8 | T1 | 12 | 2.0 | 0.252 | 5.4 | LOS A | 1.3 | 32.7 | 0.38 | 0.24 | 23.0 |
| 18 | R2 | 272 | 2.0 | 0.252 | 5.4 | LOS A | 1.3 | 32.7 | 0.38 | 0.24 | 22.7 |
| Approach | | 295 | 2.0 | 0.252 | 5.4 | LOS A | 1.3 | 32.7 | 0.38 | 0.24 | 22.7 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 269 | 2.0 | 0.340 | 5.7 | LOS A | 2.1 | 53.5 | 0.14 | 0.04 | 22.6 |
| 6 | T1 | 153 | 2.0 | 0.340 | 5.7 | LOS A | 2.1 | 53.5 | 0.14 | 0.04 | 22.7 |
| 16 | R2 | 45 | 2.0 | 0.340 | 5.7 | LOS A | 2.1 | 53.5 | 0.14 | 0.04 | 22.4 |
| Approach | | 467 | 2.0 | 0.340 | 5.7 | LOS A | 2.1 | 53.5 | 0.14 | 0.04 | 22.6 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 45 | 2.0 | 0.069 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.8 |
| 4 | T1 | 14 | 2.0 | 0.069 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.8 |
| 14 | R2 | 3 | 2.0 | 0.069 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.6 |
| Approach | | 62 | 2.0 | 0.069 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.8 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| 2 | T1 | 130 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| 12 | R2 | 15 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.0 |
| Approach | | 146 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| All Vehicles | | 970 | 2.0 | 0.340 | 5.4 | LOS A | 2.1 | 53.5 | 0.29 | 0.17 | 22.8 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 74.2
Level Of Service: F

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound |
| Approach | + | | + | | + | | + | |
| Lane Configuration | + | | + | | + | | + | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | |

volumes

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|---|--------------|------------|-------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound |
| Base Volume Input [veh/h] | 13 | 354 | 113 | 100 | 322 | 6 | 5 | 16 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 8 | 5 | 0 | 0 | 0 | 19 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 18 | 478 | 161 | 140 | 435 | 8 | 7 | 22 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 5 | 120 | 40 | 35 | 109 | 2 | 2 | 6 |
| Total Analysis Volume [veh/h] | 18 | 478 | 161 | 140 | 435 | 8 | 7 | 22 |
| Pedestrian Volume [ped/h] | 24 | | 18 | | 18 | | 10 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 21.92 | 16.60 | 0.38 | 1.78 | 2.01 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 548.02 | 414.95 | 8.90 | 44.46 | 50.18 |
| Approach Delay [s/veh] | 109.19 | 77.00 | 12.56 | 15.48 | |
| Approach LOS | F | F | B | C | C |
| Intersection Delay [s/veh] | 74.20 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report
Intersection 8: Q St & 17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 10.4
 Level Of Service: B
 Volume to Capacity (v/c): 0.006

Intersection Setup

| Name | Q St | | Q St | | 17th St | |
|------------------------|------------|--------|-----------|--------|-----------|--------|
| Approach | Northbound | | Eastbound | | Westbound | |
| Lane Configuration | T | | T | | T | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | |

volumes

| Name | Q St | | Q St | | 17th St | |
|---|--------|--------|--------|--------|---------|--------|
| Base Volume Input [veh/h] | 3 | 37 | 41 | 3 | 56 | 36 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 13 | 14 | 1 | 19 | 12 |
| Total Analysis Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 |



Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 10.40 | 8.78 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.26 |
| 95th-Percentile Queue Length [ft] | 4.38 | 4.38 | 0.00 | 0.00 | 0.00 | 6.59 |
| d, A, Approach Delay [s/veh] | 8.90 | | 0.00 | 0.00 | 0.00 | 4.53 |
| Approach LOS | A | | A | A | A | A |
| d, I, Intersection Delay [s/veh] | | | | 4.40 | | B |
| Intersection LOS | | | | | | |



Intersection Level Of Service Report
Intersection 9: Alliance Rd/17th St

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 26.4
Level Of Service: D
Volume to Capacity (v/c): 0.355

Intersection Setup

| Name | Alliance Rd Northbound | Alliance Rd Southbound | 17th St Eastbound |
|------------------------|------------------------|------------------------|-------------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Left Thru Right | Left Thru Right | Left Thru Right |
| Turning Movement | Left Thru Right | Left Thru Right | Left Thru Right |
| Lane Width [ft] | 12.00 12.00 12.00 | 12.00 12.00 12.00 | 12.00 12.00 12.00 |
| No. of Lanes in Pocket | 0 0 0 | 0 0 0 | 0 0 1 |
| Pocket Length [ft] | 100.00 100.00 100.00 | 100.00 100.00 100.00 | 100.00 20.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | Yes |

volumes

| Name | Alliance Rd Northbound | Alliance Rd Southbound | 17th St Eastbound |
|---|------------------------|------------------------|-------------------|
| Base Volume Input [veh/h] | 18 | 315 | 69 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 8 | 19 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 24 | 467 | 93 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 6 | 117 | 23 |
| Total Analysis Volume [veh/h] | 24 | 467 | 93 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 0.03 |
|------------------------------------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 8.57 | 0.00 | 0.00 | 0.00 | 0.00 | 26.38 | 11.40 |
| Movement LOS | A | A | A | A | A | D | B |
| 95th-Percentile Queue Length [veh] | 2.63 | 2.63 | 0.00 | 0.00 | 0.00 | 1.54 | 0.08 |
| 95th-Percentile Queue Length [ft] | 65.63 | 65.63 | 0.00 | 0.00 | 0.00 | 38.50 | 2.00 |
| d, A, Approach Delay [s/veh] | 0.42 | | | | | | 24.28 |
| Approach LOS | A | | | | | | C |
| d, I, Intersection Delay [s/veh] | | | | | 2.47 | | |
| Intersection LOS | | | | | D | | |

Intersection Level Of Service Report
Intersection 10: K 5011th St

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 81.7
Level Of Service: F

Intersection Setup

| Name | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | + | | | + | | | + | | | + | | |
| Lane Configuration | + | | | + | | | + | | | + | | |
| Turning Movement | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| Lane Width [ft] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Crosswalk | Yes | | | Yes | | | Yes | | | Yes | | |

volumes

| Name | K St | | | K St | | | 11th St | | | 11th St | | |
|---|--------|--------|--------|--------|--------|--------|---------|--------|--------|---------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 96 | 283 | 37 | 54 | 233 | 7 | 21 | 104 | 84 | 52 | 121 | 46 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 8 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 130 | 390 | 50 | 73 | 334 | 9 | 28 | 140 | 113 | 70 | 163 | 62 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 33 | 98 | 13 | 18 | 84 | 2 | 7 | 35 | 28 | 18 | 41 | 16 |
| Total Analyse Volume [veh/h] | 130 | 390 | 50 | 73 | 334 | 9 | 28 | 140 | 113 | 70 | 163 | 62 |
| Pedestrian Volume [ped/h] | 17 | | | 18 | | | 5 | | | 12 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | Approach | 95th-Percentile Queue Length [veh] | 10.48 | 4.58 | 5.15 |
|-----------------------------------|----------|------------------------------------|--------|--------|--------|
| 95th-Percentile Queue Length [ft] | F | 590.51 | 262.05 | 114.56 | 126.71 |
| Approach Delay [s/veh] | F | 157.31 | 53.58 | 26.05 | 28.45 |
| Approach LOS | F | F | F | D | D |
| Intersection Delay [s/veh] | 81.73 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report
Intersection 11: 11th St/Janes Rd

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 11.6
Level Of Service: B
Volume to Capacity (v/c): 0.002

Intersection Setup

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | |
|------------------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | | |
|---|---------|-------|----------|-------|---------|-------|---------|-------|-------|-------|
| | 4 | 49 | 29 | 24 | 1 | 25 | 7 | 47 | 29 | 58 |
| Base Volume Input [veh/h] | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Base Volume Adjustment Factor | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Heavy Vehicles Percentage [%] | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| Growth Rate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 |
| Total Hourly Volume [veh/h] | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Peak Hour Factor | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Other Adjustment Factor | 1 | 17 | 17 | 10 | 8 | 0 | 9 | 2 | 16 | 10 |
| Total 15-Minute Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 |
| Total Analysis Volume [veh/h] | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 7 |
| Pedestrian Volume [ped/h] | | | | | | | | | | |

Intersection Settings

| Priority Scheme | Free | Free | Free | Stop | Stop |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | Yes | Yes |
| Storage Area [veh] | 0 | 0 | 0 | 1 | 1 |
| Two-Stage Gap Acceptance | | | | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | 0.06 | 0.08 | |
|------------------------------------|------|------|------|------|-------|------|------|-------|-------|-------|-------|--|
| d_M, Delay for Movement [s/veh] | 7.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.63 | 11.12 | 8.79 | 11.20 | |
| Movement LOS | A | A | A | A | A | A | A | B | A | B | A | |
| 95th-Percentile Queue Length [veh] | 0.29 | 0.29 | 0.29 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.18 | 0.56 | 0.56 | |
| 95th-Percentile Queue Length [ft] | 7.16 | 7.16 | 7.16 | 3.96 | 3.96 | 4.52 | 4.52 | 4.52 | 4.52 | 14.07 | 14.07 | |
| d_A, Approach Delay [s/veh] | 0.27 | | 4.11 | | 10.65 | | B | | 10.44 | | B | |
| d_I, Intersection Delay [s/veh] | A | | A | | 6.19 | | B | | B | | B | |
| Intersection LOS | A | | A | | B | | B | | B | | B | |

Intersection Level Of Service Report

Intersection 12: James Rd/Foster Ave

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 9.3
 Level Of Service: A
 Volume to Capacity (v/c): 0.017

Intersection Setup

| Name | Foster Ave | James Rd | Foster Ave |
|------------------------|-------------------------|--------------------------|-------------------------|
| Approach | Northbound | Eastbound | Westbound |
| Lane Configuration | T | T | T |
| Turning Movement | Left 12.00 0 0 | Right 12.00 0 0 | Thru 12.00 0 0 |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | Foster Ave | James Rd | Foster Ave |
|---|------------|----------|------------|
| Base Volume Input [veh/h] | 11 | 9 | 10 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 15 | 12 | 14 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 4 | 3 | 4 |
| Total Analysis Volume [veh/h] | 15 | 12 | 14 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.03 | 0.00 | 0.00 | 0.02 | 0.00 |
|------------------------------------|------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.32 | 8.57 | 0.00 | 0.00 | 7.30 | 0.00 |
| Movement LOS | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.16 | 0.16 | 0.00 | 0.00 | 0.10 | 0.10 |
| 95th-Percentile Queue Length [ft] | 3.94 | 3.94 | 0.00 | 0.00 | 2.52 | 2.52 |
| d, A, Approach Delay [s/veh] | 8.79 | | 0.00 | 0.00 | 5.34 | |
| Approach LOS | A | | A | A | A | |
| d, I, Intersection Delay [s/veh] | | | 6.08 | | | |
| Intersection LOS | | | A | | | |

Intersection Level Of Service Report

Intersection 13: Foster Avenue/ Creekside Prj Driveway

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 9.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.000

Intersection Setup

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|------------------------|---------------------------|------------|---------------------------|
| Approach | Southbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 Right 12.00 | Thru 12.00 | Thru 12.00 Right 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.000 | 100.000 | 100.000 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes |
| Crosswalk | Yes | Yes | Yes |

volumes

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|---|------------------|------------|------------|
| Base Volume Input [veh/h] | 0 | 0 | 40 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 0 | 54 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 0 | 14 |
| Total Analysis Volume [veh/h] | 0 | 0 | 54 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.03 | 8.54 | 7.31 | 0.00 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 8.79 | | | | | |
| Approach LOS | A | A | A | A | A | A |
| d, I, Intersection Delay [s/veh] | | | | | | |
| Intersection LOS | | | | | | A |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.016

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|--------|-----------------|-----------|-----------------|--------|-----------------|--------|
| | Northbound | Southbound | Left | Right | Westbound | Eastbound | Left | Right | Left | Right |
| Approach | Northbound | | Southbound | | Westbound | | Eastbound | | Northwestbound | |
| Lane Configuration | T | | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Right | Thru | Left | Right | Thru | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | No | | Yes | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|------------|-------------|--------|-----------------|-----------|-----------------|--------|-----------------|--------|
| | Northbound | Southbound | Left | Right | Westbound | Eastbound | Left | Right | Left | Right |
| Base Volume Input [veh/h] | 5 | 0 | 5 | 184 | 0 | 6 | 8 | 99 | 0 | 0 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 | 0 | 0 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 2 | 0 | 2 | 62 | 0 | 2 | 3 | 34 | 0 | 0 |
| Total Analysis Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 | 0 | 0 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 0 |



Intersection Settings

| Priority Scheme | Stop | Free | Stop | Free |
|------------------------------------|------|------|------|------|
| Flared Lane | Yes | | No | |
| Storage Area [veh] | 1 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.13 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|-------|-------|------|------|------|
| d_M, Delay for Movement [s/veh] | 10.57 | 0.00 | 9.70 | 0.00 | 0.00 | 0.00 | 0.00 | 10.88 | 8.97 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A | B | A | | | |
| 95th-Percentile Queue Length [veh] | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.82 | 0.00 | 0.82 | 0.00 | 0.00 | 0.00 | 0.00 | 12.37 | 12.37 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 10.14 | | | | | | | | | | | |
| Approach LOS | B | | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 3.53 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |



Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 13.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.222

Intersection Setup

| Name | LK Wood Blvd Northbound | LK Wood Blvd Southbound | Eastbound |
|------------------------|-------------------------|-------------------------|-----------|
| Approach | ← | → | → |
| Lane Configuration | Thru | Thru | Right |
| Turning Movement | Left | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | 25.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | LK Wood Blvd | Eastbound |
|---|--------------|--------------|--------------|-----------|
| Base Volume Input [veh/h] | 87 | 27 | 89 | 181 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 117 | 36 | 120 | 244 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 29 | 9 | 30 | 61 |
| Total Analysis Volume [veh/h] | 117 | 36 | 120 | 244 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 |



Intersection Settings

| Priority Scheme | Free | Stop | Free |
|------------------------------------|------|------|------|
| Flared Lane | | Yes | |
| Storage Area [veh] | 0 | 1 | 0 |
| Two-Stage Gap Acceptance | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.22 | 0.03 | 0.01 | 0.00 |
|------------------------------------|------|------|-------|-------|-------|-------|
| d, M, Delay for Movement [s/veh] | 0.00 | 0.00 | 13.23 | 10.50 | 7.50 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.85 | 0.85 | 0.64 | 0.64 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 21.16 | 21.16 | 15.94 | 15.94 |
| d, A, Approach Delay [s/veh] | 0.00 | 0.00 | 12.74 | | 0.32 | |
| Approach LOS | A | A | B | | A | |
| d, I, Intersection Delay [s/veh] | | | 3.51 | | | |
| Intersection LOS | | | B | | | |



Intersection Level Of Service Report
Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 17.2
Level Of Service: C

Intersection Setup

| | | | |
|------------------------|--------------|--------------|------------|
| Name | LK Wood Blvd | LK Wood Blvd | Sunset Ave |
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | | | |
| Turning Movement | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 |
| Pocket Length [ft] | 100.00 | 100.00 | 60.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | Sunset Ave |
|---|--------------|--------------|------------|
| Base Volume Input [veh/h] | 95 | 183 | 225 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 1 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 129 | 247 | 304 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 32 | 62 | 76 |
| Total Analysis Volume [veh/h] | 129 | 247 | 304 |
| Pedestrian Volume [ped/h] | 75 | 0 | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | 3.60 | 2.91 | 3.60 | 2.24 | 2.45 | 2.45 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 90.02 | 72.74 | 90.12 | 56.03 | 61.25 | 61.25 |
| Approach Delay [s/veh] | 21.82 | 18.19 | 17.17 | | | |
| Approach LOS | C | C | C | | | B |
| Intersection Delay [s/veh] | 17.17 | | | | | |
| Intersection LOS | C | | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 118.6
 Level Of Service: F
 Volume to Capacity (v/c): 0.863

Intersection Setup

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|------------------------|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Lane Configuration | TFF | | | | | | TFF | | | TFF | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 25.00 | | | 25.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|---|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 74 | 0 | 118 | 0 | 0 | 0 | 93 | 430 | 0 | 0 | 251 | 67 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 1 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 101 | 0 | 159 | 0 | 0 | 0 | 128 | 585 | 0 | 0 | 340 | 90 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 25 | 0 | 40 | 0 | 0 | 0 | 32 | 146 | 0 | 0 | 85 | 23 |
| Total Analysis Volume [veh/h] | 101 | 0 | 159 | 0 | 0 | 0 | 128 | 585 | 0 | 0 | 340 | 90 |
| Pedestrian Volume [ped/h] | 75 | | | 0 | | | 0 | | | 0 | | |



Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.86 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 | 0.11 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|-------|------|------|------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 118.64 | 35.20 | 13.34 | 0.00 | 0.00 | 0.00 | 8.59 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 5.24 | 0.55 | 0.55 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 130.91 | 13.68 | 13.68 | 0.00 | 0.00 | 0.00 | 9.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 54.25 | | | 0.00 | | | 1.54 | | | 0.00 | | |
| Approach LOS | F | | | A | | | A | | | A | | |
| d_I, Intersection Delay [s/veh] | | | | 10.84 | | | | | | | | |
| Intersection LOS | | | | F | | | | | | | | |



Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop
 Delay (sec / veh): 20.3
 HCM 2010
 Level Of Service: C
 Analysis Method:
 Analysis Period: 15 minutes

Intersection Setup

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|------------------------|------------|--------|--------|--------------|--------|--------|------------|--------|-------|------------|--------|--------|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Approach | | | | | | | | | | | | |
| Lane Configuration | + | | | | | | | | | | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 30.00 | | | 30.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | G St | | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | |
|---|--------|--------|--------|--------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 35 | 7 | 11 | 311 | 391 | 190 | 128 | 201 | 46 | 90 | 123 | 112 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 1 | 0 | 0 | 0 | 0 | 1 | 4 | 6 | 2 | 0 | 2 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 48 | 9 | 15 | 420 | 528 | 258 | 177 | 277 | 64 | 122 | 168 | 151 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 12 | 2 | 4 | 105 | 132 | 65 | 44 | 69 | 16 | 31 | 42 | 38 |
| Total Analysis Volume [veh/h] | 48 | 9 | 15 | 420 | 528 | 258 | 177 | 277 | 64 | 122 | 168 | 151 |
| Pedestrian Volume [ped/h] | 60 | | | 0 | | | 0 | | | 0 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | A | | | C | | | C | | | B | | |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0.38 | 8.82 | 2.79 | 2.26 | 1.94 | 3.89 | 0.44 | 1.20 | 1.75 | 1.34 | 1.20 | 1.75 |
| 95th-Percentile Queue Length [ft] | 0.38 | 8.82 | 2.79 | 2.26 | 1.94 | 3.89 | 0.44 | 1.20 | 1.75 | 1.34 | 1.20 | 1.75 |
| Approach Delay [s/veh] | 9.61 | 220.5 | 69.63 | 69.63 | 48.52 | 97.13 | 10.93 | 29.91 | 43.81 | 33.46 | 29.91 | 43.81 |
| Approach LOS | 9.44 | 23.77 | C | C | C | C | C | C | C | C | C | C |
| Intersection Delay [s/veh] | 20.34 | | | | | | | | | | | |
| Intersection LOS | C | | | | | | | | | | | |

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset AM Future + Twin Parks

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 35 | 2.0 | 0.267 | 5.9 | LOS A | 1.3 | 33.9 | 0.46 | 0.35 | 22.8 |
| 8 | T1 | 1 | 2.0 | 0.267 | 5.9 | LOS A | 1.3 | 33.9 | 0.46 | 0.35 | 22.8 |
| 18 | R2 | 250 | 2.0 | 0.267 | 5.9 | LOS A | 1.3 | 33.9 | 0.46 | 0.35 | 22.5 |
| Approach | | 286 | 2.0 | 0.267 | 5.9 | LOS A | 1.3 | 33.9 | 0.46 | 0.35 | 22.6 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 251 | 2.0 | 0.349 | 5.8 | LOS A | 2.2 | 55.3 | 0.19 | 0.07 | 22.7 |
| 6 | T1 | 216 | 2.0 | 0.349 | 5.8 | LOS A | 2.2 | 55.3 | 0.19 | 0.07 | 22.7 |
| 16 | R2 | 7 | 2.0 | 0.349 | 5.8 | LOS A | 2.2 | 55.3 | 0.19 | 0.07 | 22.4 |
| Approach | | 474 | 2.0 | 0.349 | 5.8 | LOS A | 2.2 | 55.3 | 0.19 | 0.07 | 22.7 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 32 | 2.0 | 0.047 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.7 |
| 4 | T1 | 7 | 2.0 | 0.047 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.8 |
| 14 | R2 | 1 | 2.0 | 0.047 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.5 |
| Approach | | 40 | 2.0 | 0.047 | 4.7 | LOS A | 0.2 | 4.8 | 0.52 | 0.41 | 22.7 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.233 | 5.6 | LOS A | 1.1 | 28.7 | 0.47 | 0.36 | 23.0 |
| 2 | T1 | 230 | 2.0 | 0.233 | 5.6 | LOS A | 1.1 | 28.7 | 0.47 | 0.36 | 23.1 |
| 12 | R2 | 14 | 2.0 | 0.233 | 5.6 | LOS A | 1.1 | 28.7 | 0.47 | 0.36 | 22.8 |
| Approach | | 245 | 2.0 | 0.233 | 5.6 | LOS A | 1.1 | 28.7 | 0.47 | 0.36 | 23.1 |
| All Vehicles | | 1045 | 2.0 | 0.349 | 5.8 | LOS A | 2.2 | 55.3 | 0.34 | 0.22 | 22.7 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 38.7
Level Of Service: E

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|--------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Left |
| Approach | + | | + | | + | | + | |
| Lane Configuration | + | | + | | + | | + | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | |

volumes

| Name | Alliance Ave | | | Alliance Rd | | | Foster Ave | | | Foster Ave | | |
|---|--------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| | 3 | 232 | 116 | 120 | 290 | 3 | 5 | 11 | 8 | 185 | 5 | 65 |
| Base Volume Input [veh/h] | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Base Volume Adjustment Factor | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Heavy Vehicles Percentage [%] | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| Growth Rate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 313 | 157 | 163 | 392 | 4 | 7 | 15 | 11 | 250 | 7 | 90 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 78 | 39 | 41 | 98 | 1 | 2 | 4 | 3 | 63 | 2 | 23 |
| Total Analysis Volume [veh/h] | 4 | 313 | 157 | 163 | 392 | 4 | 7 | 15 | 11 | 250 | 7 | 90 |
| Pedestrian Volume [ped/h] | 14 | | | 7 | | | 15 | | | 10 | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 8.49 | 13.85 | 0.25 | 3.45 | 0.69 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 212.23 | 346.22 | 6.25 | 86.30 | 17.22 |
| Approach Delay [s/veh] | 32.34 | 58.27 | 12.13 | 18.40 | C |
| Approach LOS | D | F | B | B | C |
| Intersection Delay [s/veh] | 38.70 | | | | |
| Intersection LOS | E | | | | |

Intersection Level Of Service Report
Intersection 8: Q St & 17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 13.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.002

Intersection Setup

| Name | Q St | | Q St | | 17th St | |
|------------------------|------------|--------|-----------|--------|-----------|--------|
| Approach | Northbound | | Eastbound | | Westbound | |
| Lane Configuration | T | | T | | T | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | |

volumes

| Name | Q St | | Q St | | 17th St | |
|---|--------|--------|--------|--------|---------|--------|
| Base Volume Input [veh/h] | 1 | 83 | 57 | 3 | 122 | 80 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 1 | 112 | 77 | 4 | 165 | 108 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 28 | 19 | 1 | 41 | 27 |
| Total Analysis Volume [veh/h] | 1 | 112 | 77 | 4 | 165 | 108 |
| Pedestrian Volume [ped/h] | 9 | 0 | 0 | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 |
|------------------------------------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 13.55 | 9.25 | 0.00 | 0.00 | 0.00 | 7.71 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.40 | 0.40 | 0.00 | 0.00 | 0.00 | 0.67 | 0.67 |
| 95th-Percentile Queue Length [ft] | 10.06 | 10.06 | 0.00 | 0.00 | 0.00 | 16.72 | 16.72 |
| d, A, Approach Delay [s/veh] | 9.29 | | | | | | |
| Approach LOS | A | | | | | A | A |
| d, I, Intersection Delay [s/veh] | | | | | 4.97 | | B |
| Intersection LOS | | | | | | | |

Intersection Level Of Service Report
Intersection 9: Alliance Rd/17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 18.1
 Level Of Service: C
 Volume to Capacity (v/c): 0.306

Intersection Setup

| Name | Alliance Rd Northbound | Alliance Rd Southbound | 17th St Eastbound |
|------------------------|------------------------|------------------------|-------------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Left Thru Right | Left Thru Right | Left Thru Right |
| Turning Movement | Left Thru Right | Left Thru Right | Left Thru Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 |
| Pocket Length [ft] | 100.00 | 100.00 | 20.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | Yes |

volumes

| Name | Alliance Rd Northbound | Alliance Rd Southbound | 17th St Eastbound |
|---|------------------------|------------------------|-------------------|
| Base Volume Input [veh/h] | 21 | 321 | 121 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.00 | 1.00 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 4 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 21 | 325 | 121 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 5 | 81 | 30 |
| Total Analysis Volume [veh/h] | 21 | 325 | 121 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 0.03 |
|------------------------------------|-------|-------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 8.45 | 0.00 | 0.00 | 0.00 | 0.00 | 18.07 | 10.80 |
| Movement LOS | A | A | A | A | A | C | B |
| 95th-Percentile Queue Length [veh] | 1.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.28 | 0.10 |
| 95th-Percentile Queue Length [ft] | 25.06 | 25.06 | 0.00 | 0.00 | 0.00 | 31.89 | 2.42 |
| d, A, Approach Delay [s/veh] | 0.66 | | | | | | 17.04 |
| Approach LOS | A | | | | | | C |
| d, I, Intersection Delay [s/veh] | | | | | 2.84 | | |
| Intersection LOS | | | | | C | | |

Intersection Level Of Service Report
Intersection 10: K 50/11th St

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 22.7
Level Of Service: C

Intersection Setup

| Name | K St | | | K St | | | 11th St | | | 11th St | | | |
|------------------------|------------|------------|-----------|-----------|--------|--------|---------|--------|--------|---------|--------|--------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Thru | Left | Right | Thru | Left | Right | Thru | Left | Right |
| Approach | + | | | + | | | + | | | + | | | |
| Lane Configuration | + | | | + | | | + | | | + | | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 30.00 | | | 30.00 | | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | | |
| Crosswalk | Yes | | | Yes | | | Yes | | | Yes | | | |

volumes

| Name | K St | | | K St | | | 11th St | | | 11th St | | | |
|---|------------|------------|-----------|-----------|--------|--------|---------|--------|--------|---------|--------|--------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Thru | Left | Right | Thru | Left | Right | Thru | Left | Right |
| Base Volume Input [veh/h] | 109 | 143 | 16 | 37 | 182 | 6 | 38 | 153 | 112 | 32 | 73 | 27 | 27 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 147 | 194 | 22 | 50 | 250 | 8 | 51 | 207 | 151 | 43 | 99 | 36 | 36 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 37 | 49 | 6 | 13 | 63 | 2 | 13 | 52 | 38 | 11 | 25 | 9 | 9 |
| Total Analyse Volume [veh/h] | 147 | 194 | 22 | 50 | 250 | 8 | 51 | 207 | 151 | 43 | 99 | 36 | 36 |
| Pedestrian Volume [ped/h] | 9 | | | 9 | | | 6 | | | 6 | | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| Movement | Approach | 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|----------|-----------|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| Thru | Eastbound | 5.40 | 134.94 | 24.21 | C | 22.73 | C |
| Thru | Westbound | 3.92 | 97.94 | 20.04 | C | 22.73 | C |
| Left | Eastbound | 6.54 | 163.50 | 26.93 | D | 22.73 | C |
| Right | Eastbound | 1.67 | 41.74 | 14.68 | B | 22.73 | C |

Intersection Level Of Service Report
Intersection 11: 11th St/Janes Rd

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 13.3
Level Of Service: B
Volume to Capacity (V/C): 0.011

Intersection Setup

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | |
|------------------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | | | | |
|---|---------|---------|----------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| | 11th St | 11th St | 11th St | 11th St | 11th St | 11th St | 11th St | 11th St | | | | |
| Base Volume Input [veh/h] | 2 | 56 | 54 | 63 | 61 | 2 | 4 | 23 | 6 | 52 | 18 | 45 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 3 | 76 | 73 | 85 | 82 | 3 | 5 | 31 | 8 | 70 | 24 | 61 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 19 | 18 | 21 | 21 | 1 | 1 | 8 | 2 | 18 | 6 | 15 |
| Total Analysis Volume [veh/h] | 3 | 76 | 73 | 85 | 82 | 3 | 5 | 31 | 8 | 70 | 24 | 61 |
| Pedestrian Volume [ped/h] | 5 | | 5 | | 4 | | 4 | | | | | |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | Yes |
| Storage Area [veh] | 0 | 0 | 1 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.14 | 0.05 | 0.07 | |
|------------------------------------|------|------|------|-------|-------|-------|-------|-------|------|-------|-------|--|
| d, M, Delay for Movement [s/veh] | 7.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.33 | 12.86 | 9.25 | 13.04 | 9.91 | |
| Movement LOS | A | A | A | A | A | A | B | B | A | B | A | |
| 95th-Percentile Queue Length [veh] | 0.34 | 0.34 | 0.34 | 0.41 | 0.41 | 0.41 | 0.24 | 0.24 | 0.24 | 0.69 | 0.69 | |
| 95th-Percentile Queue Length [ft] | 8.44 | 8.44 | 8.44 | 10.16 | 10.16 | 10.16 | 6.00 | 6.00 | 6.00 | 17.16 | 17.16 | |
| d, A, Approach Delay [s/veh] | 0.15 | | 3.85 | | 11.89 | | | | | | | |
| Approach LOS | A | | A | | B | | | | | | | |
| d, I, Intersection Delay [s/veh] | | | 5.87 | | B | | | | | | | |
| Intersection LOS | | | B | | | | | | | | | |

Intersection Level Of Service Report

Intersection 12: James Rd/Foster Ave

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 10.3
 Level Of Service: B
 Volume to Capacity (v/c): 0.007

Intersection Setup

| Name | Foster Ave | James Rd | Foster Ave |
|------------------------|---------------|---------------|----------------|
| Approach | Northbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 | Thru 12.00 | Right 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | No | No | No |
| Crosswalk | No | No | No |

volumes

| Name | Foster Ave | James Rd | Foster Ave |
|---|------------|----------|------------|
| Base Volume Input [veh/h] | 4 | 53 | 3 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 5 | 72 | 4 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 18 | 1 |
| Total Analysis Volume [veh/h] | 5 | 72 | 4 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.07 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 10.27 | 8.63 | 0.00 | 0.00 | 0.00 | 7.39 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.24 | 0.24 | 0.00 | 0.00 | 0.00 | 0.22 | 0.22 |
| 95th-Percentile Queue Length [ft] | 5.99 | 5.99 | 0.00 | 0.00 | 0.00 | 5.39 | 5.39 |
| d, A, Approach Delay [s/veh] | 8.74 | | 0.00 | 0.00 | 0.00 | 6.91 | |
| Approach LOS | A | | A | A | A | A | |
| d, I, Intersection Delay [s/veh] | | | 7.24 | | | | |
| Intersection LOS | | | B | | | | |

Intersection Level Of Service Report
Intersection 13: Foster Ave/ Project Drive

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 9.5
 Level Of Service: A
 Volume to Capacity (v/c): 0.000

Intersection Setup

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|------------------------|------------------|----------------------|------------|
| Approach | Southbound | Eastbound | Westbound |
| Lane Configuration | T | T | T |
| Turning Movement | Left Right | Thru Left Thru Right | Thru Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | Yes | Yes | Yes |

volumes

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|---|------------------|------------|------------|
| Base Volume Input [veh/h] | 0 | 0 | 58 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 0 | 78 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 0 | 27 |
| Total Analysis Volume [veh/h] | 0 | 0 | 109 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.49 | 8.81 | 7.43 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 9.15 | | 0.00 | 0.00 | 0.00 |
| Approach LOS | A | A | A | A | A |
| d, I, Intersection Delay [s/veh] | | | 0.00 | | A |
| Intersection LOS | | | | | A |

Intersection Level Of Service Report

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes
Delay (sec / veh): 10.8
Level Of Service: B
Volume to Capacity (v/c): 0.015

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Thru | Right | Left | Right | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | No | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Base Volume Input [veh/h] | 22 | 0 | 21 | 138 | 0 | 10 | 8 | 156 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 8 | 0 | 7 | 47 | 0 | 4 | 3 | 53 |
| Total Analysis Volume [veh/h] | 30 | 0 | 28 | 186 | 0 | 14 | 11 | 211 |
| Pedestrian Volume [ped/h] | 0 | | 0 | | 11 | | 11 | |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | Yes | | |
| Storage Area [veh] | 1 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | d, M, Delay for Movement [s/veh] | Movement LOS | Stop | Free | Stop | Free |
|-------------------------|----------------------------------|--------------|------|------|-------|-------|
| 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10.26 | 0.00 | 9.47 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | A | A | A | A | B | A |
| 0.13 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.81 | 0.00 | 3.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9.88 | 0.00 | 3.35 | 0.00 | 0.00 | 20.28 | 20.28 |
| A | A | A | A | A | A | A |
| 5.55 | B | | B | | B | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 13.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.193

Intersection Setup

| Name | LK Wood Blvd | LK Wood Blvd | Eastbound |
|------------------------|-----------------|-----------------|------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Left Thru Right | Left Thru Right | Left Right |
| Turning Movement | Left Thru Right | Left Thru Right | Left Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | 25.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | Eastbound |
|---|--------------|--------------|-----------|
| Base Volume Input [veh/h] | 160 | 68 | 18 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 216 | 92 | 24 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 54 | 23 | 6 |
| Total Analysis Volume [veh/h] | 216 | 92 | 24 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Free | Stop | Free |
| Flared Lane | | Yes | |
| Storage Area [veh] | 0 | 1 | 0 |
| Two-Stage Gap Acceptance | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.19 | 0.04 | 0.02 | 0.00 |
|------------------------------------|------|------|-------|-------|-------|-------|
| d, M, Delay for Movement [s/veh] | 0.00 | 0.00 | 13.89 | 11.06 | 7.86 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.71 | 0.71 | 0.54 | 0.54 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 17.78 | 17.78 | 13.62 | 13.62 |
| d, A, Approach Delay [s/veh] | 0.00 | 0.00 | 13.12 | | 0.95 | |
| Approach LOS | A | A | B | | A | |
| d, I, Intersection Delay [s/veh] | | | 2.77 | | | |
| Intersection LOS | | | B | | | |

Intersection Level Of Service Report
Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 89.9
Level Of Service: F

Intersection Setup

| | | | | | |
|------------------------|--------------|--------|--------------|--------|------------|
| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
| Approach | Northbound | | Southbound | | Eastbound |
| Lane Configuration | ← | | ↑ | | ↑↑↑ |
| Turning Movement | Left | Thru | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 60.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 |
| Grade [%] | 0.00 | | 0.00 | | 0.00 |
| Crosswalk | Yes | | No | | No |

volumes

| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
|---|--------------|--------|--------------|--------|------------|
| Base Volume Input [veh/h] | 280 | 155 | 170 | 243 | 307 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 5 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 363 | 209 | 230 | 328 | 414 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 96 | 52 | 58 | 82 | 104 |
| Total Analysis Volume [veh/h] | 363 | 209 | 230 | 328 | 414 |
| Pedestrian Volume [ped/h] | 147 | | 0 | | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | 28.46 | 2.87 | 5.13 | 10.36 | 0.89 |
|-----------------------------------|--------|-------|--------|--------|-------|
| 95th-Percentile Queue Length [ft] | 711.52 | 74.29 | 128.18 | 255.91 | 22.37 |
| Approach Delay [s/veh] | 212.00 | 22.79 | | 37.20 | |
| Approach LOS | F | C | | E | |
| Intersection Delay [s/veh] | 89.90 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report
Intersection 4: Sunset Ave/US 101 NB Ramps

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 330.4
 Level Of Service: F
 Volume to Capacity (V/C): 1.458

Intersection Setup

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|------------------------|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Lane Configuration | TFF | | | | | | TFF | | | TFF | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 25.00 | | | 25.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|---|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 103 | 4 | 254 | 0 | 0 | 0 | 114 | 236 | 0 | 0 | 282 | 241 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 5 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 144 | 5 | 343 | 0 | 0 | 0 | 155 | 322 | 0 | 0 | 386 | 325 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 36 | 1 | 86 | 0 | 0 | 0 | 39 | 81 | 0 | 0 | 97 | 81 |
| Total Analysis Volume [veh/h] | 144 | 5 | 343 | 0 | 0 | 0 | 155 | 322 | 0 | 0 | 386 | 325 |
| Pedestrian Volume [ped/h] | 146 | | | 0 | | | 0 | | | 0 | | |



Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 1.46 | 0.06 | 0.48 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|------|------|------|-------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 330.36 | 48.35 | 12.03 | 0.00 | 0.00 | 0.00 | 9.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | | | | A | A |
| 95th-Percentile Queue Length [veh] | 10.70 | 1.21 | 1.08 | 0.00 | 0.00 | 0.00 | 0.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 267.53 | 30.22 | 26.92 | 0.00 | 0.00 | 0.00 | 15.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 105.57 | | | | | | | | | | | |
| Approach LOS | F | | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 31.83 | | | | | | | | | | | |
| Intersection LOS | F | | | | | | | | | | | |



Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop Delay (sec / veh): 13.1
 HCM 2010 Level Of Service: B
 Analysis Method: 15 minutes

Intersection Setup

| Name | G St | | US 101 Ramps | | Sunset Ave | | Sunset Ave | | |
|------------------------|------------|------------|--------------|-----------|------------|-----------|------------|-----------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | |
| Approach | + | | TTL | | TTL | | TTL | | |
| Lane Configuration | | | | | | | | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | No | | No | | No | | |

volumes

| Name | G St | | US 101 Ramps | | Sunset Ave | | Sunset Ave | | | | | |
|---|------------|------------|--------------|-----------|------------|-----------|------------|-----------|--------|--------|--------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | | | | |
| Base Volume Input [veh/h] | 75 | 30 | 26 | 149 | 279 | 101 | 67 | 175 | 60 | 111 | 152 | 116 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 3 | 0 | 0 | 0 | 0 | 3 | 4 | 1 | 0 | 0 | 10 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 104 | 41 | 35 | 201 | 377 | 139 | 93 | 240 | 82 | 150 | 215 | 157 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 26 | 10 | 9 | 50 | 94 | 35 | 23 | 60 | 21 | 38 | 54 | 39 |
| Total Analyse Volume [veh/h] | 104 | 41 | 35 | 201 | 377 | 139 | 93 | 240 | 82 | 150 | 215 | 157 |
| Pedestrian Volume [ped/h] | 112 | | 0 | | 0 | | 0 | | 0 | | 0 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | 1.09 | | 1.95 | | 1.60 | | 0.92 | | 0.70 | | 2.44 | | 0.50 | | 1.32 | | 2.07 | | 1.14 | | |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | 27.32 | | 48.75 | | 40.01 | | 40.01 | | 22.94 | | 17.54 | | 60.96 | | 12.61 | | 33.09 | | 51.72 | | |
| 95th-Percentile Queue Length [ft] | 10.40 | | 13.20 | | 13.20 | | 13.20 | | 13.20 | | 13.69 | | 13.69 | | 13.69 | | 13.49 | | 13.49 | | |
| | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | | |
| Approach LOS | | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | |
| Intersection Delay [s/veh] | | 13.12 | | 13.12 | | 13.12 | | 13.12 | | 13.12 | | 13.12 | | 13.12 | | 13.12 | | 13.12 | | 13.12 | |
| Intersection LOS | | B | | B | | B | | B | | B | | B | | B | | B | | B | | B | |

MOVEMENT SUMMARY

 Site: Int 6- Foster-Jay/Sunset PM Future + Twin Parks

New Site
Roundabout

| Movement Performance - Vehicles | | | | | | | | | | | |
|---------------------------------|--------|--------------------------|------------|---------------|-------------------|------------------|--------------------------------|-------------------|--------------|-----------------------------|-------------------|
| Mov ID | OD Mov | Demand Flows Total veh/h | Flows HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Queue Distance ft | Prop. Queued | Effective Stop Rate per veh | Average Speed mph |
| South: Foster Ave | | | | | | | | | | | |
| 3 | L2 | 11 | 2.0 | 0.223 | 5.1 | LOS A | 1.1 | 28.1 | 0.37 | 0.23 | 23.0 |
| 8 | T1 | 12 | 2.0 | 0.223 | 5.1 | LOS A | 1.1 | 28.1 | 0.37 | 0.23 | 23.1 |
| 18 | R2 | 238 | 2.0 | 0.223 | 5.1 | LOS A | 1.1 | 28.1 | 0.37 | 0.23 | 22.8 |
| Approach | | 261 | 2.0 | 0.223 | 5.1 | LOS A | 1.1 | 28.1 | 0.37 | 0.23 | 22.8 |
| East: Sunset Ave | | | | | | | | | | | |
| 1 | L2 | 267 | 2.0 | 0.338 | 5.6 | LOS A | 2.1 | 53.1 | 0.14 | 0.04 | 22.7 |
| 6 | T1 | 153 | 2.0 | 0.338 | 5.6 | LOS A | 2.1 | 53.1 | 0.14 | 0.04 | 22.7 |
| 16 | R2 | 45 | 2.0 | 0.338 | 5.6 | LOS A | 2.1 | 53.1 | 0.14 | 0.04 | 22.4 |
| Approach | | 465 | 2.0 | 0.338 | 5.6 | LOS A | 2.1 | 53.1 | 0.14 | 0.04 | 22.6 |
| North: Jay Street | | | | | | | | | | | |
| 7 | L2 | 45 | 2.0 | 0.068 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.8 |
| 4 | T1 | 14 | 2.0 | 0.068 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.8 |
| 14 | R2 | 3 | 2.0 | 0.068 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.6 |
| Approach | | 62 | 2.0 | 0.068 | 4.6 | LOS A | 0.3 | 7.1 | 0.49 | 0.38 | 22.8 |
| West: Sunset Ave | | | | | | | | | | | |
| 5 | L2 | 1 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| 2 | T1 | 130 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| 12 | R2 | 15 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.0 |
| Approach | | 146 | 2.0 | 0.145 | 4.9 | LOS A | 0.6 | 16.3 | 0.46 | 0.35 | 23.2 |
| All Vehicles | | 934 | 2.0 | 0.338 | 5.3 | LOS A | 2.1 | 53.1 | 0.28 | 0.17 | 22.8 |

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection Level Of Service Report
Intersection 7: Alliance Rd/Foster Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 68.7
Level Of Service: F

Intersection Setup

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|------------------------|--------------|------------|-------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound |
| Approach | + | | + | | + | | + | |
| Lane Configuration | + | | + | | + | | + | |
| Turning Movement | Left | Thru | Right | Thru | Left | Thru | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 70.00 | 100.00 |
| Speed [mph] | 30.00 | | 25.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | |

volumes

| Name | Alliance Ave | | Alliance Rd | | Foster Ave | | Foster Ave | |
|---|--------------|------------|-------------|--------|------------|--------|------------|-----------|
| | Northbound | Southbound | Thru | Right | Left | Thru | Right | Westbound |
| Base Volume Input [veh/h] | 13 | 354 | 113 | 100 | 322 | 6 | 5 | 16 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 18 | 478 | 153 | 140 | 435 | 8 | 7 | 22 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 5 | 120 | 38 | 35 | 109 | 2 | 2 | 6 |
| Total Analysis Volume [veh/h] | 18 | 478 | 153 | 140 | 435 | 8 | 7 | 22 |
| Pedestrian Volume [ped/h] | 24 | | 18 | | 18 | | 10 | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 20.52 | 16.04 | 0.35 | 1.49 | 1.87 |
|------------------------------------|--------|--------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 513.08 | 400.81 | 8.76 | 37.14 | 46.80 |
| Approach Delay [s/veh] | 98.19 | 72.11 | 12.44 | 14.88 | B |
| Approach LOS | F | F | B | B | B |
| Intersection Delay [s/veh] | 68.75 | | | | |
| Intersection LOS | F | | | | |

Intersection Level Of Service Report
Intersection 8: Q St & 17th St

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 10.4
Level Of Service: B
Volume to Capacity (v/c): 0.006

Intersection Setup

| Name | Q St | | Q St | | 17th St | |
|------------------------|------------|--------|-----------|--------|-----------|--------|
| Approach | Northbound | | Eastbound | | Westbound | |
| Lane Configuration | T | | T | | T | |
| Turning Movement | Left | Right | Thru | Right | Left | Thru |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | Yes | | No | | No | |

volumes

| Name | Q St | | Q St | | 17th St | |
|---|--------|--------|--------|--------|---------|--------|
| Base Volume Input [veh/h] | 3 | 37 | 41 | 3 | 56 | 36 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 13 | 14 | 1 | 19 | 12 |
| Total Analysis Volume [veh/h] | 4 | 50 | 55 | 4 | 76 | 49 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 10.40 | 8.78 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.26 |
| 95th-Percentile Queue Length [ft] | 4.38 | 4.38 | 0.00 | 0.00 | 0.00 | 6.59 |
| d, A, Approach Delay [s/veh] | 8.90 | | 0.00 | 0.00 | 0.00 | 4.53 |
| Approach LOS | A | | A | A | A | A |
| d, I, Intersection Delay [s/veh] | | | 4.40 | | | B |
| Intersection LOS | | | | | | |

Intersection Level Of Service Report
Intersection 9: Alliance Rd/17th St

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 25.5
 Level Of Service: D
 Volume to Capacity (v/c): 0.346

Intersection Setup

| Name | Alliance Rd Northbound | Alliance Rd Southbound | 17th St Eastbound |
|------------------------|------------------------|------------------------|-------------------|
| Approach | Northbound | Southbound | Eastbound |
| Lane Configuration | Left Thru Right | Left Thru Right | Left Thru Right |
| Turning Movement | Left Thru Right | Left Thru Right | Left Thru Right |
| Lane Width [ft] | 12.00 12.00 12.00 | 12.00 12.00 12.00 | 12.00 12.00 12.00 |
| No. of Lanes in Pocket | 0 0 0 | 0 0 0 | 0 0 1 |
| Pocket Length [ft] | 100.00 100.00 100.00 | 100.00 100.00 100.00 | 100.00 20.00 |
| Speed [mph] | 30.00 | 30.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | Yes |

volumes

| Name | Alliance Rd | Alliance Rd | 17th St |
|---|-------------|-------------|---------|
| Base Volume Input [veh/h] | 18 | 315 | 69 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 3 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 24 | 428 | 93 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 6 | 107 | 23 |
| Total Analysis Volume [veh/h] | 24 | 428 | 93 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
|------------------------------------|------|------|------|
| Flared Lane | | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | | | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 0.03 |
|------------------------------------|-------|-------|------|------|------|------|-------|-------|
| d, M, Delay for Movement [s/veh] | 8.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.54 | 11.26 |
| Movement LOS | A | A | A | A | A | A | D | B |
| 95th-Percentile Queue Length [veh] | 2.53 | 2.53 | 0.00 | 0.00 | 0.00 | 0.00 | 1.49 | 0.08 |
| 95th-Percentile Queue Length [ft] | 63.37 | 63.37 | 0.00 | 0.00 | 0.00 | 0.00 | 37.14 | 1.95 |
| d, A, Approach Delay [s/veh] | 0.42 | | | | | | | 23.54 |
| Approach LOS | A | A | A | A | A | A | C | C |
| d, I, Intersection Delay [s/veh] | | | | | | 2.44 | | |
| Intersection LOS | | | | | | D | | |

Intersection Level Of Service Report
Intersection 10: K S011th St

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 76.1
Level Of Service: F

Intersection Setup

| Name | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
|------------------------|------------|--------|--------|------------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | + | | | + | | | + | | | + | | |
| Lane Configuration | + | | | + | | | + | | | + | | |
| Turning Movement | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| Lane Width [ft] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Crosswalk | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

volumes

| Name | K St | | | 11th St | | | 11th St | | |
|---|--------|--------|--------|---------|--------|--------|---------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 96 | 283 | 37 | 54 | 233 | 7 | 21 | 104 | 84 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 130 | 387 | 50 | 73 | 318 | 9 | 28 | 140 | 113 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 33 | 97 | 13 | 18 | 80 | 2 | 7 | 35 | 28 |
| Total Analyse Volume [veh/h] | 130 | 387 | 50 | 73 | 318 | 9 | 28 | 140 | 113 |
| Pedestrian Volume [ped/h] | 17 | 18 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [veh] | 95th-Percentile Queue Length [ft] | Approach Delay [s/veh] | Approach LOS | Intersection Delay [s/veh] | Intersection LOS |
|------------------------------------|-----------------------------------|------------------------|--------------|----------------------------|------------------|
| 22.74 | 568.41 | 147.39 | F | 76.12 | F |
| 9.36 | 233.90 | 46.52 | E | | |
| 4.47 | 111.82 | 25.33 | D | | |
| 5.02 | 125.62 | 27.62 | D | | |

Intersection Level Of Service Report
Intersection 11: 11th St/Janes Rd

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 11.6
 Level Of Service: B
 Volume to Capacity (v/c): 0.002

Intersection Setup

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | |
|------------------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | Northbound | Southbound | Eastbound | Westbound | Eastbound | Westbound | Eastbound | Westbound | |
| Approach | + | | + | | + | | + | | |
| Lane Configuration | + | | + | | + | | + | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 | | 30.00 | | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | | |
| Crosswalk | Yes | | Yes | | Yes | | Yes | | |

volumes

| Name | 11th St | | Janes Rd | | 11th St | | 11th St | | | |
|---|---------|--------|----------|--------|---------|--------|---------|--------|--------|--------|
| | 4 | 49 | 29 | 24 | 1 | 25 | 7 | 47 | 29 | 58 |
| Base Volume Input [veh/h] | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Base Volume Adjustment Factor | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Heavy Vehicles Percentage [%] | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| Growth Rate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 1 | 17 | 17 | 10 | 8 | 0 | 9 | 2 | 16 | 10 |
| Total Analysis Volume [veh/h] | 5 | 66 | 66 | 39 | 32 | 1 | 34 | 9 | 63 | 39 |
| Pedestrian Volume [ped/h] | 4 | | | 3 | | | 3 | | | 7 |

Intersection Settings

| Priority Scheme | Free | Free | Free | Stop | Stop |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | Yes | Yes |
| Storage Area [veh] | 0 | 0 | 0 | 1 | 1 |
| Two-Stage Gap Acceptance | | | | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | 0.06 | 0.08 | |
|------------------------------------|------|------|------|------|-------|-------|-------|------|-------|-------|-------|--|
| d_M, Delay for Movement [s/veh] | 7.30 | 0.00 | 0.00 | 0.00 | 0.00 | 11.63 | 11.12 | 8.79 | 11.19 | 11.20 | 9.44 | |
| Movement LOS | A | A | A | A | A | B | B | A | B | B | A | |
| 95th-Percentile Queue Length [veh] | 0.29 | 0.29 | 0.29 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.56 | 0.56 | 0.56 | |
| 95th-Percentile Queue Length [ft] | 7.16 | 7.16 | 7.16 | 3.96 | 3.96 | 4.52 | 4.52 | 4.52 | 14.07 | 14.07 | 14.07 | |
| d_A, Approach Delay [s/veh] | 0.27 | | 4.11 | | 10.65 | | B | | 10.44 | | B | |
| d_I, Intersection Delay [s/veh] | A | | A | | 6.19 | | B | | B | | B | |
| Intersection LOS | A | | A | | B | | B | | B | | B | |

Intersection Level Of Service Report

Intersection 12: James Rd/Foster Ave

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 9.3
 Level Of Service: A
 Volume to Capacity (v/c): 0.017

Intersection Setup

| Name | Foster Ave | James Rd | Foster Ave |
|------------------------|---------------|---------------|----------------|
| Approach | Northbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 | Thru 12.00 | Right 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.00 | 100.00 | 100.00 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | No | No | No |
| Crosswalk | No | No | No |

volumes

| Name | Foster Ave | James Rd | Foster Ave |
|---|------------|----------|------------|
| Base Volume Input [veh/h] | 11 | 9 | 10 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 15 | 12 | 14 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 4 | 3 | 4 |
| Total Analysis Volume [veh/h] | 15 | 12 | 14 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.02 | 0.03 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 |
|------------------------------------|------|------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.32 | 8.57 | 0.00 | 0.00 | 0.00 | 7.30 | 0.00 |
| Movement LOS | A | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.16 | 0.16 | 0.00 | 0.00 | 0.00 | 0.10 | 0.10 |
| 95th-Percentile Queue Length [ft] | 3.94 | 3.94 | 0.00 | 0.00 | 0.00 | 2.52 | 2.52 |
| d, A, Approach Delay [s/veh] | 8.79 | | 0.00 | 0.00 | 0.00 | 5.34 | |
| Approach LOS | A | | A | A | A | A | |
| d, I, Intersection Delay [s/veh] | | | 6.08 | | | | |
| Intersection LOS | | | A | | | | |

Intersection Level Of Service Report

Intersection 13: Foster Avenue/ Creekside Prj Driveway

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 9.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.000

Intersection Setup

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|------------------------|---------------------------|--------------------------|---------------------------|
| Approach | Southbound | Eastbound | Westbound |
| Lane Configuration | | | |
| Turning Movement | Left 12.00 Right 12.00 | Thru 12.00 Left 12.00 | Thru 12.00 Right 12.00 |
| Lane Width [ft] | 0 | 0 | 0 |
| No. of Lanes in Pocket | 100.000 | 100.000 | 100.000 |
| Pocket Length [ft] | 30.00 | 30.00 | 30.00 |
| Speed [mph] | 0.00 | 0.00 | 0.00 |
| Grade [%] | Yes | Yes | Yes |
| Crosswalk | Yes | Yes | Yes |

volumes

| Name | Creekside Prj DW | Foster Ave | Foster Ave |
|---|------------------|------------|------------|
| Base Volume Input [veh/h] | 0 | 40 | 38 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 54 | 51 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 14 | 13 |
| Total Analysis Volume [veh/h] | 0 | 54 | 51 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
|------------------------------------|------|------|------|
| Flared Lane | No | | |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|------|------|------|------|------|
| d, M, Delay for Movement [s/veh] | 9.03 | 8.54 | 7.31 | 0.00 | 0.00 |
| Movement LOS | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d, A, Approach Delay [s/veh] | 8.79 | | 0.00 | | 0.00 |
| Approach LOS | A | | A | | A |
| d, I, Intersection Delay [s/veh] | | | 0.00 | | A |
| Intersection LOS | | | | | A |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes
 Delay (sec / veh): 10.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.016

Intersection Setup

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|------------------------|-------------|------------|-------------|-----------|-----------------|-----------|-----------------|----------------|
| | Northbound | Southbound | Westbound | Eastbound | Westbound | Eastbound | Northwestbound | Southwestbound |
| Approach | T | | T | | T | | T | |
| Lane Configuration | T | | T | | T | | T | |
| Turning Movement | Thru | Right | Left | Right | Thru | Left | Right | Left |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | | 25.00 | | 25.00 | | 30.00 | |
| Grade [%] | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| Crosswalk | No | | Yes | | Yes | | Yes | |

volumes

| Name | St Louis Rd | | St Louis Rd | | US 101 Overpass | | US 101 Overpass | |
|---|-------------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | St Louis Rd | US 101 Overpass | St Louis Rd | US 101 Overpass | St Louis Rd | US 101 Overpass | St Louis Rd | US 101 Overpass |
| Base Volume Input [veh/h] | 5 | 0 | 5 | 184 | 0 | 6 | 8 | 99 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.00 | 1.35 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 2 | 0 | 2 | 62 | 0 | 2 | 3 | 34 |
| Total Analysis Volume [veh/h] | 7 | 0 | 7 | 248 | 0 | 8 | 11 | 134 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Intersection Settings

| | | | |
|------------------------------------|------|------|------|
| Priority Scheme | Stop | Free | Free |
| Flared Lane | Yes | | |
| Storage Area [veh] | 1 | 0 | 0 |
| Two-Stage Gap Acceptance | No | No | No |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|-------|------|------|------|------|------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 10.57 | 0.00 | 9.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 0.82 | 0.00 | 0.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 10.14 | | | | | | | | | | |
| Approach LOS | B | | | | | | | | | | |
| d_I, Intersection Delay [s/veh] | 3.53 | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
 Analysis Method: HCM 2010
 Analysis Period: 15 minutes

Delay (sec / veh): 13.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.222

Intersection Setup

| Name | LK Wood Blvd Northbound | LK Wood Blvd Southbound | Eastbound |
|------------------------|-------------------------|-------------------------|-----------------|
| Approach | ← | → | → |
| Lane Configuration | Thru | Thru | Right |
| Turning Movement | Left 12.00 0 | Right 12.00 0 | Left 12.00 0 |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 25.00 | 25.00 | 30.00 |
| Grade [%] | 0.00 | 0.00 | 0.00 |
| Crosswalk | No | No | No |

volumes

| Name | LK Wood Blvd | LK Wood Blvd | Eastbound |
|---|--------------|--------------|-----------|
| Base Volume Input [veh/h] | 87 | 27 | 8 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 117 | 36 | 11 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 29 | 9 | 3 |
| Total Analysis Volume [veh/h] | 117 | 36 | 11 |
| Pedestrian Volume [ped/h] | 0 | 0 | 0 |



Intersection Settings

| Priority Scheme | Free | Stop | Free |
|------------------------------------|------|------|------|
| Flared Lane | | Yes | |
| Storage Area [veh] | 0 | 1 | 0 |
| Two-Stage Gap Acceptance | | No | |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.22 | 0.03 | 0.01 | 0.00 |
|------------------------------------|------|------|-------|-------|-------|-------|
| d, M, Delay for Movement [s/veh] | 0.00 | 0.00 | 13.23 | 10.50 | 7.50 | 0.00 |
| Movement LOS | A | A | B | B | A | A |
| 95th-Percentile Queue Length [veh] | 0.00 | 0.00 | 0.85 | 0.85 | 0.64 | 0.64 |
| 95th-Percentile Queue Length [ft] | 0.00 | 0.00 | 21.16 | 21.16 | 15.94 | 15.94 |
| d, A, Approach Delay [s/veh] | 0.00 | 0.00 | 12.74 | | 0.32 | |
| Approach LOS | A | A | B | B | A | A |
| d, I, Intersection Delay [s/veh] | | | 3.51 | | | |
| Intersection LOS | | | B | | | |



Intersection Level Of Service Report

Intersection 3: LK Wood Blvd/ Sunset Ave

Control Type: All-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes

Delay (sec / veh): 17.2
Level Of Service: C

Intersection Setup

| | | | | | |
|------------------------|--------------|--------|--------------|--------|------------|
| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
| Approach | Northbound | | Southbound | | Eastbound |
| Lane Configuration | ← | | ↑ | | ↑↑↑ |
| Turning Movement | Left | Thru | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 60.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | 30.00 | | 30.00 |
| Grade [%] | 0.00 | | 0.00 | | 0.00 |
| Crosswalk | Yes | | No | | No |

volumes

| Name | LK Wood Blvd | | LK Wood Blvd | | Sunset Ave |
|---|--------------|--------|--------------|--------|------------|
| Base Volume Input [veh/h] | 95 | 183 | 225 | 158 | 382 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 1 | 0 | 0 | 0 | 3 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 129 | 128 | 247 | 304 | 532 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 32 | 62 | 76 | 53 | 133 |
| Total Analysis Volume [veh/h] | 129 | 128 | 247 | 304 | 532 |
| Pedestrian Volume [ped/h] | 75 | 0 | 0 | 213 | 0 |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | 3.60 | 2.91 | 3.60 | 2.24 | 2.44 | 2.44 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|
| 95th-Percentile Queue Length [ft] | 89.97 | 72.70 | 90.06 | 56.02 | 61.05 | 61.05 |
| Approach Delay [s/veh] | 21.81 | 18.17 | 14.80 | | | |
| Approach LOS | C | C | C | | B | B |
| Intersection Delay [s/veh] | 17.15 | | | | | |
| Intersection LOS | C | | | | | |

Intersection Level Of Service Report

Control Type: Two-way stop
Analysis Method: HCM 2010
Analysis Period: 15 minutes
Delay (sec / veh): 120.6
Level Of Service: F
Volume to Capacity (V/C): 0.867

Intersection Setup

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|------------------------|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Approach | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
| Lane Configuration | TFF | | | | | | TFF | | | T | | |
| Turning Movement | | | | | | | | | | | | |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pocket Length [ft] | 320.00 | 100.00 | 320.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 25.00 | | | 25.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | | No | | | No | | | No | | |

volumes

| Name | US 101 NB On-Ramp | | | US 101 NB Off-Ramp | | | Sunset Ave Eastbound | | | Sunset Ave Westbound | | |
|---|-------------------|--------|--------|--------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Base Volume Input [veh/h] | 74 | 0 | 118 | 0 | 0 | 0 | 93 | 430 | 0 | 0 | 251 | 67 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.00 | 1.00 | 1.00 | 1.35 | 1.35 | 1.00 | 1.00 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 1 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 100 | 0 | 159 | 0 | 0 | 0 | 132 | 584 | 0 | 0 | 340 | 90 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 25 | 0 | 40 | 0 | 0 | 0 | 33 | 146 | 0 | 0 | 85 | 23 |
| Total Analysis Volume [veh/h] | 100 | 0 | 159 | 0 | 0 | 0 | 132 | 584 | 0 | 0 | 340 | 90 |
| Pedestrian Volume [ped/h] | 75 | | | 0 | | | 0 | | | 0 | | |

Intersection Settings

| Priority Scheme | Stop | Stop | Stop | Free | Free |
|------------------------------------|------|------|------|------|------|
| Flared Lane | | | | | |
| Storage Area [veh] | 0 | 0 | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | No | | | | |
| Number of Storage Spaces in Median | 0 | 0 | 0 | 0 | 0 |

Movement, Approach, & Intersection Results

| V/C, Movement V/C Ratio | 0.87 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 | 0.12 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------------|--------|-------|-------|------|------|------|-------|------|------|------|------|------|
| d_M, Delay for Movement [s/veh] | 120.64 | 35.60 | 13.33 | 0.00 | 0.00 | 0.00 | 8.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Movement LOS | F | E | B | | | | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh] | 5.24 | 0.55 | 0.55 | 0.00 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft] | 131.00 | 13.66 | 13.66 | 0.00 | 0.00 | 0.00 | 9.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 54.76 | | | 0.00 | | | 1.59 | | | 0.00 | | |
| Approach LOS | F | | | A | | | A | | | A | | |
| d_I, Intersection Delay [s/veh] | | | | | | | 10.90 | | | F | | |
| Intersection LOS | | | | | | | | | | F | | |

Intersection Level Of Service Report
Intersection 5: Sunset Ave/US 101 Ramps-G SH St
 All-way stop
 Delay (sec / veh): 20.4
 HCM 2010
 Level Of Service: C
 Analysis Method:
 Analysis Period: 15 minutes

Intersection Setup

| Name | G St | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | | |
|------------------------|------------|--------|--------------|--------|--------|------------|--------|-------|------------|--------|--------|--------|
| | Northbound | | Southbound | | | Eastbound | | | Westbound | | | |
| Approach | + | | + | | | + | | | + | | | |
| Lane Configuration | | | | | | | | | | | | |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Pocket | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Speed [mph] | 30.00 | | | 30.00 | | | 30.00 | | | 30.00 | | |
| Grade [%] | 0.00 | | | 0.00 | | | 0.00 | | | 0.00 | | |
| Crosswalk | Yes | | No | | | No | | | No | | | |

volumes

| Name | G St | | US 101 Ramps | | | Sunset Ave | | | Sunset Ave | | | |
|---|------------|--------|--------------|--------|--------|------------|--------|--------|------------|--------|--------|--------|
| | Northbound | | Southbound | | | Eastbound | | | Westbound | | | |
| Base Volume Input [veh/h] | 35 | 7 | 11 | 311 | 391 | 190 | 128 | 201 | 46 | 90 | 123 | 112 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%] | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Growth Rate | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 9 | 0 | 0 | 1 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 47 | 9 | 15 | 420 | 528 | 260 | 173 | 280 | 62 | 122 | 167 | 151 |
| Peak Hour Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 12 | 2 | 4 | 105 | 132 | 65 | 43 | 70 | 16 | 31 | 42 | 38 |
| Total Analysis Volume [veh/h] | 47 | 9 | 15 | 420 | 528 | 260 | 173 | 280 | 62 | 122 | 167 | 151 |
| Pedestrian Volume [ped/h] | 60 | | 0 | | | 0 | | | 0 | | | |

Intersection Settings

Lanes

Movement, Approach, & Intersection Results

| 95th-Percentile Queue Length [ft] | A | | | C | | | C | | | B | | |
|-----------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0.38 | 8.81 | 2.78 | 2.29 | 1.87 | 3.97 | 0.42 | 1.20 | 1.74 | 1.20 | 1.74 | 1.34 |
| 95th-Percentile Queue Length [ft] | 9.54 | 220.3 | 69.56 | 57.23 | 46.83 | 99.24 | 10.54 | 29.91 | 43.43 | 29.91 | 43.43 | 33.47 |
| Approach Delay [s/veh] | 9.48 | 23.74 | 18.75 | 14.76 | | | | | | | | |
| Approach LOS | A | | | C | | | C | | | B | | |
| Intersection Delay [s/veh] | | | | 20.37 | | | | | | | | |
| Intersection LOS | | | | C | | | | | | | | |