

Scenario 1 Typical Day (CV0%)

1a. Shockwave - Speed Difference between Adjacent Sublinks

| Hour Start | Hour End | Mean | 95th %ile | Maximum | Std. Dev. |
|------------|----------|------|-----------|---------|-----------|
| 14:30 | 15:30 | 1.96 | 10.06 | 22.82 | 3.70 |
| 15:30 | 16:30 | 2.22 | 10.41 | 25.29 | 4.04 |
| 16:30 | 17:30 | 5.65 | 31.94 | 39.81 | 10.04 |
| 17:30 | 18:30 | 9.45 | 38.63 | 41.72 | 13.85 |
| 18:30 | 19:30 | 3.61 | 23.73 | 41.01 | 8.43 |
| 19:30 | 20:30 | 3.11 | 22.73 | 51.09 | 8.13 |
| 14:30 | 20:30 | 4.33 | 29.44 | 51.09 | 9.14 |
| 15:30 | 19:30 | 5.23 | 34.29 | 41.72 | 9.99 |

1b. Shockwave - Speed Difference within Sublinks

| Hour Start | Hour End | Mean | 95th %ile | Maximum | Std. Dev. |
|------------|----------|------|-----------|---------|-----------|
| 14:30 | 15:30 | 1.60 | 6.99 | 20.50 | 2.73 |
| 15:30 | 16:30 | 1.80 | 7.34 | 19.58 | 2.94 |
| 16:30 | 17:30 | 5.70 | 24.34 | 31.62 | 7.97 |
| 17:30 | 18:30 | 5.57 | 22.38 | 37.53 | 7.93 |
| 18:30 | 19:30 | 1.85 | 8.58 | 27.01 | 4.31 |
| 19:30 | 20:30 | 3.84 | 31.68 | 49.85 | 9.40 |
| 14:30 | 20:30 | 3.39 | 18.22 | 49.85 | 6.66 |
| 15:30 | 19:30 | 3.73 | 19.97 | 37.53 | 6.46 |

2. Queues - Average Connected Vehicle Seconds in Queue (sec/veh)

| Hour Start | Hour End | Average VSQ |
|------------|----------|-------------|
| 14:30 | 15:30 | 11.3 |
| 15:30 | 16:30 | 41.7 |
| 16:30 | 17:30 | 59.9 |
| 17:30 | 18:30 | 91.1 |
| 18:30 | 19:30 | 23.1 |
| 19:30 | 20:30 | 0.0 |
| 14:30 | 20:30 | 51.9 |
| 15:30 | 19:30 | 60.9 |

3. Throughput - Vehicle Miles Traveled (VMT)

Standard deviation across simulation runs (N=10)

| Hour Start | Hour End | 1000's VMT | St. Dev. (1000's VMT) |
|------------|----------|------------|-----------------------|
| 14:30 | 15:30 | 51.3 | 0.3 |
| 15:30 | 16:30 | 53.1 | 0.3 |
| 16:30 | 17:30 | 61.1 | 0.5 |
| 17:30 | 18:30 | 59.0 | 0.5 |
| 18:30 | 19:30 | 47.6 | 0.7 |
| 19:30 | 20:30 | 2.8 | 0.1 |
| 14:30 | 20:30 | 274.9 | 0.7 |
| 15:30 | 19:30 | 220.7 | 0.6 |

4. Speed Variance

See Performance Measure #1: Shockwave - Speed Difference between Adjacent Sublinks

5. Average Travel Time - Vehicle Hours Traveled (VHT)

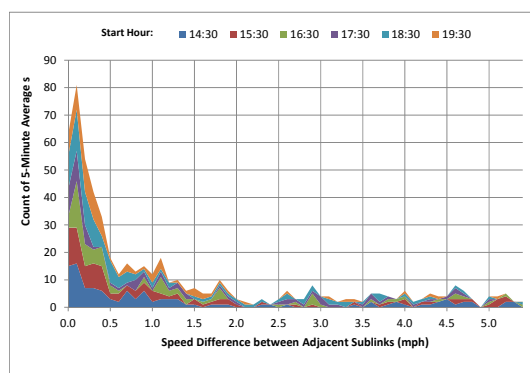
Standard deviation across simulation runs (N=10)

| Hour Start | Hour End | VHT | St. Dev. VHT |
|------------|----------|-------|--------------|
| 14:30 | 15:30 | 861 | 6 |
| 15:30 | 16:30 | 893 | 6 |
| 16:30 | 17:30 | 1,178 | 25 |
| 17:30 | 18:30 | 1,496 | 52 |
| 18:30 | 19:30 | 876 | 53 |
| 19:30 | 20:30 | 549 | 16 |
| 14:30 | 20:30 | 5,854 | 107 |
| 15:30 | 19:30 | 4,444 | 111 |

6. Reliability Measure - 95th Percentile Travel Time Index (TTI)

Free flow speed assumed to be 65 mph

| Hour Start | Hour End | 95th %ile TTI (Part 1) | 95th %ile TTI (Part 2) | 95th %ile TTI (Combined) |
|------------|----------|------------------------|------------------------|--------------------------|
| 14:30 | 15:30 | 1.09 | 1.09 | 1.09 |
| 15:30 | 16:30 | 1.10 | 1.10 | 1.09 |
| 16:30 | 17:30 | 1.58 | 1.15 | 1.48 |
| 17:30 | 18:30 | 1.87 | 1.16 | 1.71 |
| 18:30 | 19:30 | 1.68 | 1.13 | 1.56 |
| 19:30 | 20:30 | 1.06 | 1.06 | 1.06 |
| 14:30 | 20:30 | 1.80 | 1.15 | 1.66 |
| 15:30 | 19:30 | 1.82 | 1.15 | 1.67 |



For clarity purposes, zero speed differences are not plotted.

7. Number of Lane Changes per 1,000 Connected Vehicles

Averages are not additive across parts or hours

| Hour Start | Hour End | Lane Changes (Part 1) | Lane Changes (Part 2) | Lane Changes (Combined) |
|------------|----------|-----------------------|-----------------------|-------------------------|
| 14:30 | 15:30 | 358 | 138 | 386 |
| 15:30 | 16:30 | 359 | 138 | 389 |
| 16:30 | 17:30 | 397 | 165 | 442 |
| 17:30 | 18:30 | 390 | 185 | 455 |
| 18:30 | 19:30 | 356 | 146 | 385 |
| 19:30 | 20:30 | 158 | 69 | 164 |
| 14:30 | 20:30 | 408 | 170 | 449 |
| 15:30 | 19:30 | 411 | 174 | 456 |

8. Number of Stops per Connected Vehicle

Averages are not additive across parts or hours

| Hour Start | Hour End | Number Stops (Part 1) | Number Stops (Part 2) | Number Stops (Combined) |
|------------|----------|-----------------------|-----------------------|-------------------------|
| 14:30 | 15:30 | 10 | 4 | 11 |
| 15:30 | 16:30 | 34 | 18 | 38 |
| 16:30 | 17:30 | 52 | 23 | 56 |
| 17:30 | 18:30 | 168 | 39 | 159 |
| 18:30 | 19:30 | 47 | 15 | 46 |
| 19:30 | 20:30 | 0 | 0 | 0 |
| 14:30 | 20:30 | 72 | 21 | 71 |
| 15:30 | 19:30 | 86 | 25 | 84 |

9. Latent Demand and Delay

| Start | End | Latent Demand (veh) | Latent Delay (veh-hr) |
|-------|-------|---------------------|-----------------------|
| 14:30 | 20:30 | 1,123 | 599 |

Number of Connected Vehicles

Totals do not match sum of hourly as some vehicles reported for more than one hour or part

| Start | End | Part 1 Vehicles | Part 2 Vehicles | Number Vehicles |
|-------|-------|-----------------|-----------------|-----------------|
| 14:30 | 15:30 | 2,259 | 1,973 | 2,905 |
| 15:30 | 16:30 | 2,393 | 2,048 | 3,059 |
| 16:30 | 17:30 | 2,855 | 2,447 | 3,631 |
| 17:30 | 18:30 | 2,824 | 2,432 | 3,568 |
| 18:30 | 19:30 | 2,143 | 1,912 | 2,795 |
| 19:30 | 20:30 | 155 | 156 | 214 |
| 14:30 | 20:30 | 11,503 | 10,506 | 14,801 |
| 15:30 | 19:30 | 9,387 | 8,490 | 12,056 |