

## Scenario 3 60-Minute Incident (CV0%)

### 1a. Shockwave - Speed Difference between Adjacent Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	1.96	9.22	25.97	3.58
15:30	16:30	5.40	37.42	45.83	11.27
16:30	17:30	10.03	39.64	43.41	14.25
17:30	18:30	13.79	39.15	40.81	15.11
18:30	19:30	10.70	39.29	43.19	14.46
19:30	20:30	4.48	28.48	47.52	9.61
14:30	20:30	7.73	38.50	47.52	12.73
15:30	19:30	9.98	39.32	45.83	14.08

### 1b. Shockwave - Speed Difference within Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	1.80	7.62	24.44	3.18
15:30	16:30	3.63	28.61	34.85	7.76
16:30	17:30	8.25	30.95	39.36	10.33
17:30	18:30	6.60	22.17	36.43	7.56
18:30	19:30	4.64	22.45	34.69	6.97
19:30	20:30	4.80	30.39	47.47	9.92
14:30	20:30	4.95	25.98	47.47	8.20
15:30	19:30	5.78	27.51	39.36	8.39

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

Hour Start	Hour End	Average VSQ
14:30	15:30	11.6
15:30	16:30	72.0
16:30	17:30	125.6
17:30	18:30	159.7
18:30	19:30	119.1
19:30	20:30	239.3
14:30	20:30	117.1
15:30	19:30	134.4

### 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	51.4	0.3
15:30	16:30	52.2	0.6
16:30	17:30	59.6	1.2
17:30	18:30	58.6	1.2
18:30	19:30	46.4	4.0
19:30	20:30	5.6	4.6
14:30	20:30	273.6	1.4
15:30	19:30	216.7	5.7

### 4. Speed Variance

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

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

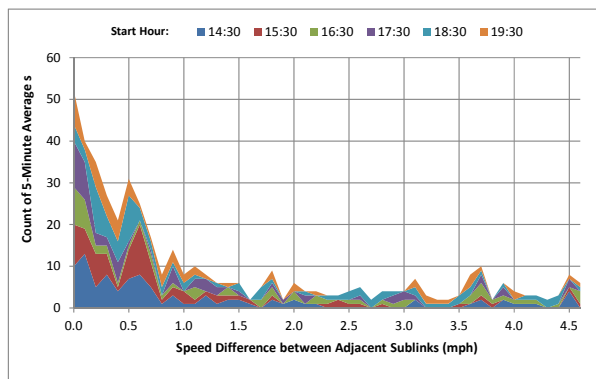
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	861	7
15:30	16:30	1,054	89
16:30	17:30	1,492	161
17:30	18:30	1,739	130
18:30	19:30	1,072	181
19:30	20:30	706	100
14:30	20:30	6,925	437
15:30	19:30	5,358	483

### 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	1.72	1.11	1.58
16:30	17:30	2.01	1.16	1.82
17:30	18:30	2.28	1.17	2.03
18:30	19:30	2.06	1.13	1.86
19:30	20:30	1.80	1.06	1.57
14:30	20:30	2.22	1.16	1.99
15:30	19:30	2.24	1.16	2.00



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	346	132	373
15:30	16:30	354	133	386
16:30	17:30	381	173	438
17:30	18:30	383	167	439
18:30	19:30	362	144	393
19:30	20:30	241	42	232
14:30	20:30	413	170	455
15:30	19:30	417	175	462

### 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	11	4	11
15:30	16:30	95	30	95
16:30	17:30	248	57	233
17:30	18:30	386	82	364
18:30	19:30	337	40	287
19:30	20:30	1,411	112	1,234
14:30	20:30	283	49	255
15:30	19:30	302	57	276

### 9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	1,309	662

### 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	1,955	2,897
15:30	16:30	2,434	2,016	3,069
16:30	17:30	2,930	2,449	3,707
17:30	18:30	2,905	2,437	3,640
18:30	19:30	2,233	1,891	2,877
19:30	20:30	280	236	341
14:30	20:30	11,489	10,429	14,735
15:30	19:30	9,363	8,351	11,985