

## Scenario 2 30-Minute Incident (CV10%)

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

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	2.00	6.39	15.79	2.75
15:30	16:30	4.69	33.92	40.47	8.70
16:30	17:30	7.02	27.51	33.29	9.23
17:30	18:30	7.38	25.84	31.01	9.06
18:30	19:30	3.86	19.55	35.72	7.23
19:30	20:30	3.15	22.73	51.09	8.10
14:30	20:30	4.68	24.88	51.09	8.13
15:30	19:30	5.74	25.96	40.47	8.66

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

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	2.40	6.86	24.65	2.86
15:30	16:30	3.67	13.46	36.71	5.47
16:30	17:30	7.62	19.46	28.22	6.26
17:30	18:30	5.05	14.91	24.90	4.54
18:30	19:30	2.04	7.71	22.90	3.59
19:30	20:30	4.06	33.72	49.77	9.63
14:30	20:30	4.14	17.64	49.77	6.12
15:30	19:30	4.60	18.03	36.71	5.48

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

Hour Start	Hour End	Average VSQ
14:30	15:30	12.0
15:30	16:30	57.8
16:30	17:30	70.1
17:30	18:30	98.9
18:30	19:30	27.7
19:30	20:30	0.0
14:30	20:30	61.6
15:30	19:30	72.6

### 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	52.9	0.3
16:30	17:30	60.5	0.6
17:30	18:30	59.0	0.7
18:30	19:30	48.4	0.7
19:30	20:30	2.7	0.1
14:30	20:30	275.0	0.7
15:30	19:30	220.9	0.6

### 4. Speed Variance

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

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

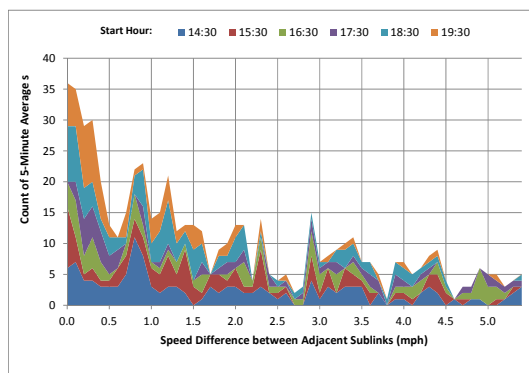
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	877	10
15:30	16:30	1,072	22
16:30	17:30	1,311	80
17:30	18:30	1,613	78
18:30	19:30	945	68
19:30	20:30	541	17
14:30	20:30	6,359	201
15:30	19:30	4,940	201

### 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	1.12	1.10	1.12
15:30	16:30	1.47	1.14	1.39
16:30	17:30	1.79	1.16	1.64
17:30	18:30	2.05	1.16	1.85
18:30	19:30	1.87	1.13	1.71
19:30	20:30	1.08	1.06	1.07
14:30	20:30	1.99	1.15	1.81
15:30	19:30	2.02	1.15	1.83



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	342	136	374
15:30	16:30	342	146	388
16:30	17:30	345	170	404
17:30	18:30	328	172	398
18:30	19:30	349	143	383
19:30	20:30	139	62	141
14:30	20:30	379	172	430
15:30	19:30	378	177	434

### 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	12	4	12
15:30	16:30	70	28	74
16:30	17:30	84	31	86
17:30	18:30	206	46	195
18:30	19:30	62	19	61
19:30	20:30	0	0	0
14:30	20:30	102	28	99
15:30	19:30	122	33	119

### 9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	1,056	579

### 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	1,125	973	1,437
15:30	16:30	1,215	1,021	1,530
16:30	17:30	1,438	1,219	1,831
17:30	18:30	1,432	1,207	1,796
18:30	19:30	1,113	987	1,427
19:30	20:30	81	84	115
14:30	20:30	5,716	5,226	7,327
15:30	19:30	4,674	4,235	5,980