

## Scenario 6 Rainy Day with 60-Minute Incident (CV25%)

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

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	3.96	12.63	28.05	4.56
15:30	16:30	5.15	23.51	31.23	6.65
16:30	17:30	5.79	26.62	35.68	8.15
17:30	18:30	6.88	27.14	40.45	9.02
18:30	19:30	6.04	28.92	34.56	8.53
19:30	20:30	3.60	21.52	53.83	8.28
14:30	20:30	5.24	23.91	53.83	7.79
15:30	19:30	5.97	26.08	40.45	8.11

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

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	4.06	11.33	26.47	4.24
15:30	16:30	5.40	19.51	36.94	5.89
16:30	17:30	7.66	22.21	31.39	6.58
17:30	18:30	5.76	13.51	32.29	5.00
18:30	19:30	4.52	10.15	19.42	3.27
19:30	20:30	4.71	32.21	46.45	8.96
14:30	20:30	5.35	17.38	46.45	6.13
15:30	19:30	5.84	17.83	36.94	5.44

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

Hour Start	Hour End	Average VSQ
14:30	15:30	11.8
15:30	16:30	120.6
16:30	17:30	283.3
17:30	18:30	599.8
18:30	19:30	363.8
19:30	20:30	428.2
14:30	20:30	356.3
15:30	19:30	415.7

### 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	51.7	0.5
15:30	16:30	49.3	0.2
16:30	17:30	48.5	1.5
17:30	18:30	40.2	4.1
18:30	19:30	44.0	3.5
19:30	20:30	14.1	3.1
14:30	20:30	247.7	4.8
15:30	19:30	181.9	6.3

### 4. Speed Variance

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

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

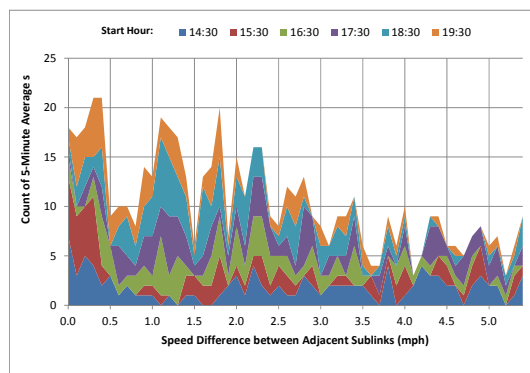
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	1,015	45
15:30	16:30	1,316	21
16:30	17:30	1,896	37
17:30	18:30	2,022	115
18:30	19:30	1,670	152
19:30	20:30	633	55
14:30	20:30	8,553	266
15:30	19:30	6,905	233

### 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	1.39	1.10	1.32
15:30	16:30	2.55	1.12	2.23
16:30	17:30	3.68	1.28	3.11
17:30	18:30	5.73	1.27	4.73
18:30	19:30	5.64	1.12	4.66
19:30	20:30	5.09	1.06	4.16
14:30	20:30	5.55	1.18	4.59
15:30	19:30	5.64	1.23	4.65



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	412	154	445
15:30	16:30	375	142	413
16:30	17:30	324	165	389
17:30	18:30	287	172	358
18:30	19:30	342	143	384
19:30	20:30	313	33	318
14:30	20:30	439	191	482
15:30	19:30	414	196	464

### 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	209	38	192
16:30	17:30	724	104	637
17:30	18:30	2,494	244	2,089
18:30	19:30	1,726	145	1,454
19:30	20:30	2,740	227	2,670
14:30	20:30	1,448	118	1,194
15:30	19:30	1,605	140	1,320

### 9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	7,898	3,732

### 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	2,904	2,501	3,694
15:30	16:30	3,052	2,456	3,819
16:30	17:30	3,660	2,693	4,598
17:30	18:30	3,277	2,472	4,201
18:30	19:30	3,069	2,324	3,875
19:30	20:30	824	581	895
14:30	20:30	13,150	12,326	17,176
15:30	19:30	10,439	9,400	13,693