

Scenario 5 Rainy Day with 30-Minute Incident (CV25%)

1a. Shockwave - Speed Difference between Adjacent Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	4.13	13.59	31.01	5.13
15:30	16:30	5.58	20.86	29.99	6.86
16:30	17:30	6.66	22.83	34.24	8.12
17:30	18:30	6.36	27.05	36.76	8.90
18:30	19:30	6.69	25.87	34.69	8.70
19:30	20:30	3.16	20.32	48.88	7.15
14:30	20:30	5.43	23.35	48.88	7.75
15:30	19:30	6.32	24.49	36.76	8.14

1b. Shockwave - Speed Difference within Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	4.51	13.45	26.79	4.69
15:30	16:30	5.50	15.47	38.00	5.19
16:30	17:30	7.77	19.17	28.73	5.56
17:30	18:30	8.15	25.36	33.70	7.63
18:30	19:30	4.77	15.49	24.35	4.21
19:30	20:30	3.19	12.83	28.83	5.42
14:30	20:30	5.65	18.89	38.00	5.84
15:30	19:30	6.55	19.29	38.00	5.96

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

Hour Start	Hour End	Average VSQ
14:30	15:30	13.5
15:30	16:30	85.4
16:30	17:30	176.9
17:30	18:30	548.5
18:30	19:30	378.7
19:30	20:30	441.2
14:30	20:30	309.0
15:30	19:30	352.6

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	51.6	0.8
15:30	16:30	51.2	0.4
16:30	17:30	52.9	1.6
17:30	18:30	42.7	5.4
18:30	19:30	43.9	3.4
19:30	20:30	14.7	2.3
14:30	20:30	257.0	6.7
15:30	19:30	190.7	6.7

4. Speed Variance

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

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

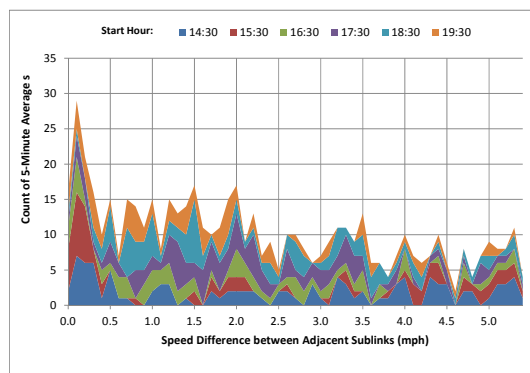
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	1,001	55
15:30	16:30	1,272	71
16:30	17:30	1,649	80
17:30	18:30	1,967	105
18:30	19:30	1,712	56
19:30	20:30	653	66
14:30	20:30	8,253	201
15:30	19:30	6,600	234

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	1.31	1.11	1.27
15:30	16:30	2.02	1.13	1.82
16:30	17:30	3.24	1.22	2.81
17:30	18:30	4.92	1.28	4.09
18:30	19:30	5.07	1.11	4.21
19:30	20:30	5.02	1.06	4.11
14:30	20:30	4.90	1.18	4.08
15:30	19:30	4.92	1.21	4.09



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	420	159	455
15:30	16:30	396	160	442
16:30	17:30	350	170	412
17:30	18:30	292	171	366
18:30	19:30	343	145	389
19:30	20:30	309	27	310
14:30	20:30	444	193	491
15:30	19:30	418	197	473

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	14	5	14
15:30	16:30	133	33	127
16:30	17:30	381	59	338
17:30	18:30	1,861	233	1,608
18:30	19:30	1,610	144	1,369
19:30	20:30	2,791	225	2,725
14:30	20:30	1,147	105	960
15:30	19:30	1,210	122	1,014

9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	6,494	2,969

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	2,891	2,496	3,680
15:30	16:30	3,066	2,526	3,853
16:30	17:30	3,593	2,801	4,539
17:30	18:30	3,380	2,570	4,286
18:30	19:30	3,142	2,317	3,938
19:30	20:30	853	611	924
14:30	20:30	13,551	12,614	17,578
15:30	19:30	10,848	9,663	14,108