

Scenario 5 Rainy Day with 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	3.95	15.73	33.05	6.46
15:30	16:30	6.27	30.15	38.86	9.02
16:30	17:30	8.07	27.13	36.50	9.68
17:30	18:30	9.53	35.76	39.56	11.89
18:30	19:30	7.65	33.91	37.21	10.96
19:30	20:30	3.06	21.45	50.31	7.47
14:30	20:30	6.42	31.13	50.31	9.75
15:30	19:30	7.88	32.68	39.56	10.47

1b. Shockwave - Speed Difference within Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	3.79	14.00	24.50	4.52
15:30	16:30	5.54	22.20	36.71	6.58
16:30	17:30	8.93	24.80	36.29	7.22
17:30	18:30	9.02	24.72	32.97	8.00
18:30	19:30	4.59	11.43	20.71	4.01
19:30	20:30	3.22	14.81	45.33	6.98
14:30	20:30	5.85	21.58	45.33	6.75
15:30	19:30	7.02	23.40	36.71	6.78

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

Hour Start	Hour End	Average VSQ
14:30	15:30	12.6
15:30	16:30	83.1
16:30	17:30	167.1
17:30	18:30	572.6
18:30	19:30	387.3
19:30	20:30	439.2
14:30	20:30	313.9
15:30	19:30	358.7

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	51.5	0.5
15:30	16:30	51.8	0.7
16:30	17:30	53.5	2.2
17:30	18:30	42.0	4.8
18:30	19:30	43.6	3.0
19:30	20:30	14.7	2.4
14:30	20:30	257.1	6.2
15:30	19:30	190.9	6.6

4. Speed Variance

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

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

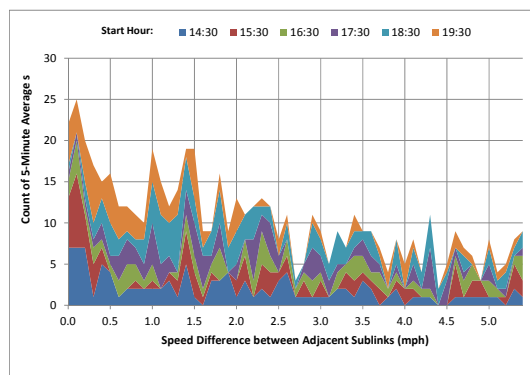
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	940	41
15:30	16:30	1,178	133
16:30	17:30	1,591	109
17:30	18:30	1,946	105
18:30	19:30	1,666	44
19:30	20:30	625	68
14:30	20:30	7,948	307
15:30	19:30	6,382	313

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	1.19	1.11	1.17
15:30	16:30	1.79	1.12	1.63
16:30	17:30	3.11	1.24	2.68
17:30	18:30	5.03	1.23	4.18
18:30	19:30	5.16	1.13	4.28
19:30	20:30	5.20	1.06	4.25
14:30	20:30	5.03	1.17	4.18
15:30	19:30	5.04	1.20	4.19



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	368	156	412
15:30	16:30	352	152	401
16:30	17:30	328	168	390
17:30	18:30	298	174	372
18:30	19:30	339	140	382
19:30	20:30	278	23	277
14:30	20:30	416	189	466
15:30	19:30	399	193	454

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	13	4	13
15:30	16:30	133	31	126
16:30	17:30	351	55	310
17:30	18:30	1,951	233	1,675
18:30	19:30	1,692	147	1,435
19:30	20:30	2,769	225	2,698
14:30	20:30	1,180	104	983
15:30	19:30	1,252	121	1,043

9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	6,401	2,891

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	1,149	999	1,463
15:30	16:30	1,218	1,011	1,530
16:30	17:30	1,428	1,118	1,816
17:30	18:30	1,352	1,024	1,717
18:30	19:30	1,245	917	1,562
19:30	20:30	339	237	368
14:30	20:30	5,390	5,016	7,006
15:30	19:30	4,319	3,850	5,629