

Scenario 3 60-Minute Incident (CV10%)

1a. Shockwave - Speed Difference between Adjacent Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	2.19	8.02	14.58	2.93
15:30	16:30	5.39	33.19	41.48	9.72
16:30	17:30	7.04	25.27	33.41	9.21
17:30	18:30	9.77	31.13	36.27	10.92
18:30	19:30	7.10	30.81	38.23	10.06
19:30	20:30	3.53	22.78	51.09	8.21
14:30	20:30	5.84	27.98	51.09	9.27
15:30	19:30	7.32	30.23	41.48	10.06

1b. Shockwave - Speed Difference within Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	2.52	9.30	25.13	3.35
15:30	16:30	4.35	22.09	34.37	6.42
16:30	17:30	7.26	19.48	29.59	6.02
17:30	18:30	6.70	22.59	29.50	6.15
18:30	19:30	4.42	16.99	24.50	4.98
19:30	20:30	4.42	32.57	45.56	9.45
14:30	20:30	4.95	19.11	45.56	6.51
15:30	19:30	5.68	20.19	34.37	6.04

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	81.6
16:30	17:30	130.9
17:30	18:30	171.3
18:30	19:30	145.5
19:30	20:30	261.5
14:30	20:30	133.3
15:30	19:30	152.0

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	0.4
15:30	16:30	51.6	0.2
16:30	17:30	59.0	0.8
17:30	18:30	58.3	1.6
18:30	19:30	46.1	4.7
19:30	20:30	6.9	5.4
14:30	20:30	273.3	1.3
15:30	19:30	214.9	6.4

4. Speed Variance

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

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

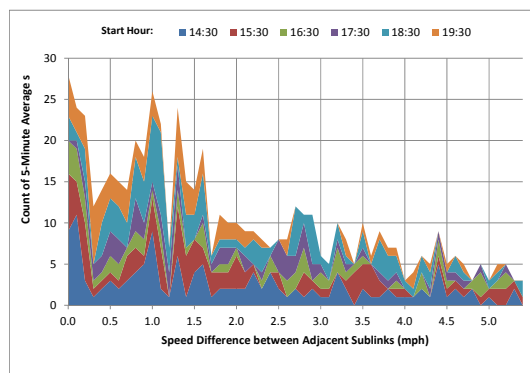
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	883	11
15:30	16:30	1,126	27
16:30	17:30	1,616	44
17:30	18:30	1,905	79
18:30	19:30	1,222	248
19:30	20:30	566	36
14:30	20:30	7,317	356
15:30	19:30	5,869	331

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	1.13	1.10	1.12
15:30	16:30	1.97	1.12	1.78
16:30	17:30	2.34	1.16	2.08
17:30	18:30	2.58	1.16	2.27
18:30	19:30	2.41	1.13	2.13
19:30	20:30	2.08	1.06	1.82
14:30	20:30	2.52	1.15	2.22
15:30	19:30	2.54	1.16	2.23



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	334	137	370
15:30	16:30	318	132	359
16:30	17:30	320	171	390
17:30	18:30	337	160	401
18:30	19:30	326	136	363
19:30	20:30	204	34	202
14:30	20:30	379	171	429
15:30	19:30	376	175	431

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	119	34	117
16:30	17:30	268	62	253
17:30	18:30	419	92	398
18:30	19:30	457	51	392
19:30	20:30	1,617	142	1,468
14:30	20:30	349	57	313
15:30	19:30	366	65	332

9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	1,342	677

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	1,136	986	1,449
15:30	16:30	1,218	992	1,528
16:30	17:30	1,497	1,222	1,884
17:30	18:30	1,495	1,207	1,855
18:30	19:30	1,153	957	1,468
19:30	20:30	174	145	206
14:30	20:30	5,706	5,202	7,305
15:30	19:30	4,645	4,136	5,939