

### Scenario 3 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	2.68	7.45	18.99	2.90
15:30	16:30	4.72	24.23	36.27	6.99
16:30	17:30	6.10	22.42	30.37	7.75
17:30	18:30	7.91	29.47	34.69	9.14
18:30	19:30	6.79	24.95	35.35	7.91
19:30	20:30	3.52	22.37	50.71	7.85
14:30	20:30	5.29	22.87	50.71	7.63
15:30	19:30	6.38	24.93	36.27	8.04

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

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	3.26	8.50	23.37	3.34
15:30	16:30	4.43	14.75	35.89	5.26
16:30	17:30	6.64	19.19	26.63	5.44
17:30	18:30	5.45	14.11	27.37	4.83
18:30	19:30	5.02	16.39	24.21	4.73
19:30	20:30	5.61	33.58	48.90	10.39
14:30	20:30	5.07	17.52	48.90	6.20
15:30	19:30	5.38	17.04	35.89	5.12

#### 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	82.6
16:30	17:30	136.7
17:30	18:30	169.4
18:30	19:30	145.4
19:30	20:30	257.1
14:30	20:30	133.9
15:30	19:30	152.6

#### 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	51.5	0.5
15:30	16:30	51.4	0.2
16:30	17:30	58.9	0.7
17:30	18:30	58.6	1.8
18:30	19:30	46.1	4.5
19:30	20:30	6.8	5.3
14:30	20:30	273.4	1.2
15:30	19:30	215.0	6.5

#### 4. Speed Variance

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

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

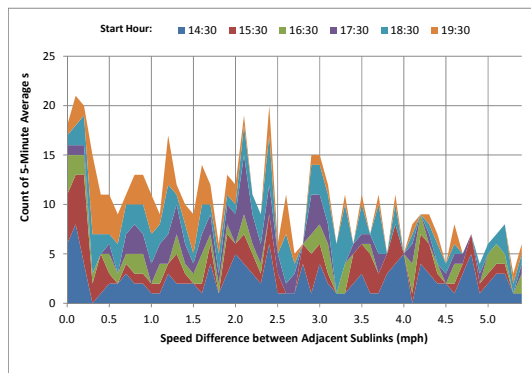
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	925	43
15:30	16:30	1,190	14
16:30	17:30	1,680	40
17:30	18:30	1,930	117
18:30	19:30	1,236	248
19:30	20:30	615	56
14:30	20:30	7,577	363
15:30	19:30	6,037	333

#### 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	1.23	1.10	1.20
15:30	16:30	2.08	1.12	1.87
16:30	17:30	2.38	1.16	2.11
17:30	18:30	2.65	1.16	2.32
18:30	19:30	2.37	1.12	2.10
19:30	20:30	2.24	1.06	1.94
14:30	20:30	2.58	1.15	2.27
15:30	19:30	2.62	1.16	2.30



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	366	136	394
15:30	16:30	362	134	395
16:30	17:30	377	166	432
17:30	18:30	390	163	443
18:30	19:30	372	137	398
19:30	20:30	262	37	254
14:30	20:30	433	170	470
15:30	19:30	432	174	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	12	5	13
15:30	16:30	121	34	119
16:30	17:30	284	65	268
17:30	18:30	415	91	393
18:30	19:30	445	47	378
19:30	20:30	1,571	141	1,437
14:30	20:30	348	56	312
15:30	19:30	364	65	330

#### 9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	1,347	674

#### 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	2,859	2,481	3,645
15:30	16:30	3,078	2,522	3,862
16:30	17:30	3,761	3,082	4,728
17:30	18:30	3,725	3,063	4,649
18:30	19:30	2,855	2,370	3,651
19:30	20:30	450	367	528
14:30	20:30	14,355	13,136	18,394
15:30	19:30	11,690	10,449	14,962