

Scenario 4 Rainy Day (CV10%)

1a. Shockwave - Speed Difference between Adjacent Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	3.50	15.09	32.60	6.05
15:30	16:30	3.29	9.35	29.01	4.86
16:30	17:30	6.27	25.10	35.65	7.96
17:30	18:30	6.42	30.97	40.93	9.35
18:30	19:30	7.00	35.69	39.45	10.97
19:30	20:30	3.55	23.32	50.23	8.39
14:30	20:30	5.00	27.62	50.23	8.34
15:30	19:30	5.75	28.90	40.93	8.66

1b. Shockwave - Speed Difference within Sublinks

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	3.06	12.59	26.62	4.65
15:30	16:30	3.62	13.47	26.23	4.36
16:30	17:30	9.03	25.66	35.00	7.83
17:30	18:30	8.06	24.17	34.98	7.88
18:30	19:30	4.78	14.68	26.73	4.65
19:30	20:30	2.91	13.07	40.10	5.76
14:30	20:30	5.24	20.69	40.10	6.46
15:30	19:30	6.37	22.67	35.00	6.64

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

Hour Start	Hour End	Average VSQ
14:30	15:30	11.5
15:30	16:30	43.8
16:30	17:30	109.6
17:30	18:30	527.0
18:30	19:30	378.3
19:30	20:30	394.4
14:30	20:30	270.9
15:30	19:30	309.9

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	0.4
15:30	16:30	53.0	0.3
16:30	17:30	56.0	1.2
17:30	18:30	43.0	3.8
18:30	19:30	45.3	2.0
19:30	20:30	13.9	2.1
14:30	20:30	262.7	4.2
15:30	19:30	197.2	5.4

4. Speed Variance

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

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

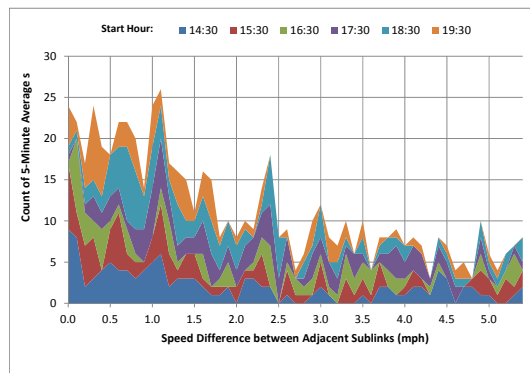
Standard deviation across simulation runs (N=10)

Hour Start	Hour End	VHT	St. Dev. VHT
14:30	15:30	918	32
15:30	16:30	941	12
16:30	17:30	1,403	45
17:30	18:30	1,983	73
18:30	19:30	1,688	75
19:30	20:30	612	57
14:30	20:30	7,544	99
15:30	19:30	6,015	79

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	1.18	1.11	1.16
15:30	16:30	1.17	1.11	1.16
16:30	17:30	2.44	1.25	2.18
17:30	18:30	4.43	1.31	3.72
18:30	19:30	4.86	1.12	4.04
19:30	20:30	4.18	1.06	3.49
14:30	20:30	4.69	1.18	3.91
15:30	19:30	4.75	1.21	3.95



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	397	159	435
15:30	16:30	381	150	418
16:30	17:30	335	177	400
17:30	18:30	303	175	378
18:30	19:30	333	137	374
19:30	20:30	285	33	291
14:30	20:30	420	188	468
15:30	19:30	399	190	453

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	11	4	11
15:30	16:30	46	19	49
16:30	17:30	167	34	152
17:30	18:30	1,488	207	1,299
18:30	19:30	1,644	139	1,390
19:30	20:30	2,442	275	2,411
14:30	20:30	946	92	795
15:30	19:30	999	102	838

9. Latent Demand and Delay

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	5,382	2,486

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	1,150	997	1,468
15:30	16:30	1,194	1,017	1,518
16:30	17:30	1,388	1,127	1,775
17:30	18:30	1,370	1,016	1,731
18:30	19:30	1,263	944	1,588
19:30	20:30	318	224	348
14:30	20:30	5,486	5,069	7,116
15:30	19:30	4,404	3,909	5,724