

**Scenario 4**  
**Rainy Day (CV0%)****1a. Shockwave - Speed Difference between Adjacent Sublinks**

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	3.62	18.92	41.63	8.51
15:30	16:30	3.60	21.58	38.71	7.73
16:30	17:30	8.12	37.72	42.77	12.08
17:30	18:30	9.55	40.58	46.13	13.51
18:30	19:30	8.01	39.04	43.01	12.76
19:30	20:30	3.66	29.35	46.60	9.53
14:30	20:30	6.10	37.93	46.60	11.17
15:30	19:30	7.32	38.39	46.13	11.86

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

Hour Start	Hour End	Mean	95th %ile	Maximum	Std. Dev.
14:30	15:30	2.49	11.41	26.85	4.44
15:30	16:30	2.65	10.68	27.47	4.32
16:30	17:30	10.16	34.51	42.43	11.21
17:30	18:30	10.67	35.98	44.57	10.80
18:30	19:30	5.66	18.82	27.93	5.47
19:30	20:30	2.57	10.17	37.57	5.87
14:30	20:30	5.70	26.89	44.57	8.44
15:30	19:30	7.28	30.07	44.57	9.18

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

Hour Start	Hour End	Average VSQ
14:30	15:30	11.9
15:30	16:30	41.9
16:30	17:30	119.4
17:30	18:30	558.1
18:30	19:30	403.3
19:30	20:30	497.5
14:30	20:30	289.8
15:30	19:30	324.2

**3. Throughput - Vehicle Miles Traveled (VMT)***Standard deviation across simulation runs (N=10)*

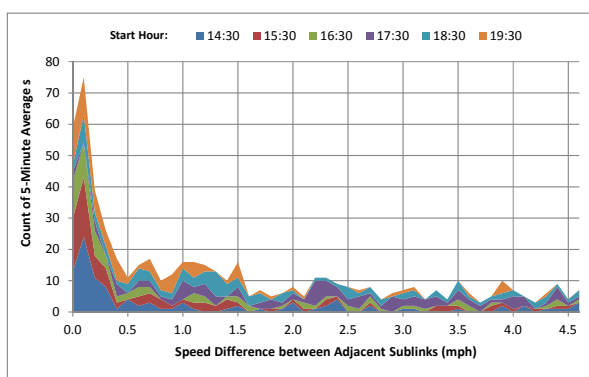
Hour Start	Hour End	1000's VMT	St. Dev. (1000's VMT)
14:30	15:30	51.3	0.3
15:30	16:30	53.0	0.3
16:30	17:30	56.4	1.8
17:30	18:30	41.9	6.7
18:30	19:30	43.9	1.8
19:30	20:30	15.9	1.8
14:30	20:30	262.5	7.0
15:30	19:30	195.3	7.3

**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	898	35
15:30	16:30	919	16
16:30	17:30	1,317	52
17:30	18:30	1,853	124
18:30	19:30	1,656	82
19:30	20:30	632	65
14:30	20:30	7,276	158
15:30	19:30	5,747	162

**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	1.14	1.12	1.13
15:30	16:30	1.12	1.11	1.12
16:30	17:30	2.39	1.25	2.10
17:30	18:30	4.35	1.26	3.65
18:30	19:30	4.79	1.11	3.99
19:30	20:30	4.81	1.06	3.93
14:30	20:30	4.64	1.18	3.85
15:30	19:30	4.64	1.21	3.87

*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	404	159	438
15:30	16:30	401	158	439
16:30	17:30	404	172	452
17:30	18:30	307	164	369
18:30	19:30	362	137	398
19:30	20:30	325	28	328
14:30	20:30	451	184	489
15:30	19:30	432	185	475

**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	5	12
15:30	16:30	39	19	43
16:30	17:30	177	35	161
17:30	18:30	1,568	205	1,350
18:30	19:30	1,694	140	1,432
19:30	20:30	3,016	309	3,001
14:30	20:30	1,017	93	850
15:30	19:30	1,023	101	856

**9. Latent Demand and Delay**

Start	End	Latent Demand (veh)	Latent Delay (veh-hr)
14:30	20:30	5,481	2,489

**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	2,271	1,965	2,914
15:30	16:30	2,396	2,044	3,050
16:30	17:30	2,774	2,267	3,532
17:30	18:30	2,655	2,003	3,390
18:30	19:30	2,534	1,855	3,178
19:30	20:30	704	486	758
14:30	20:30	10,995	10,128	14,267
15:30	19:30	8,837	7,779	11,482