

SUPPLEMENTAL MATERIALS

Are travelers substituting between transportation network companies (TNC) and public buses? A case study in Pittsburgh

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1 Regression Results Tables

An individual regression model was applied to each location for three time periods during weekdays; morning peak (7am-10am), evening peak (4pm-7pm), and late night (7pm-12am). Significant results are presented in the original manuscript. All other results are listed in the following document.

1.1 Weekday Morning Peak (7am-10am) Results

	Benedum Center (Weekday 7am-10am)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	-174.290*** (38.899)	-187.569*** (38.273)	-182.241*** (38.243)
Surge Indicator	7.396 (7.809)	8.449 (7.330)	5.459 (8.198)
Bus Count	5.221*** (0.197)	5.270*** (0.197)	5.272*** (0.196)
Ave. Stop Count	69.287*** (5.723)	70.824*** (5.659)	69.735*** (5.651)
Temperature	0.636 (3.188)	-0.855 (3.136)	-0.963 (3.119)
Rain	4.332 (4.397)	4.843 (4.328)	3.973 (4.290)
Snow	-1.134 (5.483)	-2.215 (5.462)	-1.741 (5.421)
North I-376 (Inbound)	-0.367** (0.144)	-0.381*** (0.144)	-0.369** (0.144)
South I-376 (Outbound)	-0.279** (0.131)	-0.281** (0.128)	-0.285** (0.127)
South I-279 (Inbound)	-0.105 (0.177)	-0.091 (0.176)	-0.101 (0.175)
North I-279 (Outbound)	0.406 (0.363)	0.414 (0.357)	0.433 (0.356)
West I-376 (Inbound)	0.700** (0.341)	0.736** (0.320)	0.734** (0.319)
East I-376 (Outbound)	-0.608 (0.373)	-0.492 (0.373)	-0.510 (0.372)
DT_Forbes_East	0.269 (0.426)	0.205 (0.421)	0.186 (0.421)
DT_Liberty_East	0.985* (0.582)	0.865 (0.570)	0.802 (0.568)
DT_PENN_East	-0.649 (0.651)	-0.499 (0.643)	-0.489 (0.640)
DT_5th_West	0.319 (0.403)	0.275 (0.402)	0.225 (0.401)
DT_Liberty_West	0.030 (0.296)	-0.009 (0.295)	0.0002 (0.294)
Observations	1,216	1,265	1,273
R ²	0.708	0.707	0.702
Adjusted R ²	0.698	0.696	0.691

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 1: Regression results for Benedum Center

CONSOL Energy Center (Weekday 7am-10am)			
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−2.355 (4.521)	−1.524 (4.405)	−2.340 (4.369)
Surge Indicator	−0.036 (0.909)	1.388 (0.914)	1.886** (0.931)
Bus Count	0.592*** (0.051)	0.615*** (0.050)	0.615*** (0.050)
Ave. Stop Count	1.135*** (0.275)	1.121*** (0.268)	1.148*** (0.266)
Temperature	0.609 (0.395)	0.547 (0.382)	0.554 (0.378)
Rain	0.523 (0.542)	0.696 (0.524)	0.684 (0.515)
Snow	1.691** (0.685)	1.264* (0.664)	1.381** (0.660)
North I-376 (Inbound)	0.006 (0.018)	0.007 (0.017)	0.007 (0.017)
South I-376 (Outbound)	−0.015 (0.016)	−0.021 (0.016)	−0.017 (0.015)
South I-279 (Inbound)	−0.013 (0.022)	−0.002 (0.021)	−0.006 (0.021)
North I-279 (Outbound)	0.021 (0.044)	0.017 (0.044)	0.034 (0.043)
West I-376 (Inbound)	−0.017 (0.040)	−0.026 (0.039)	−0.024 (0.039)
East I-376 (Outbound)	0.012 (0.045)	0.008 (0.045)	0.006 (0.044)
DT_Forbes_East	−0.091* (0.052)	−0.102** (0.051)	−0.109** (0.051)
DT_Liberty_East	0.137* (0.071)	0.133* (0.069)	0.133* (0.069)
DT_PENN_East	−0.195** (0.079)	−0.189** (0.078)	−0.193** (0.077)
DT_5th_West	−0.008 (0.050)	−0.017 (0.049)	−0.016 (0.048)
DT_Liberty_West	0.028 (0.036)	0.019 (0.036)	0.022 (0.036)
Observations	1,204	1,245	1,257
R ²	0.195	0.205	0.211
Adjusted R ²	0.166	0.177	0.183

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 2: Regression results for CONSOL Energy Center

University of Pittsburgh (Weekday 7am-10am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−33.667*** (9.265)	−33.945*** (8.923)	−35.630*** (8.799)
Surge Indicator	2.675 (1.755)	1.576 (1.639)	2.837 (1.733)
Bus Count	1.637*** (0.104)	1.648*** (0.101)	1.661*** (0.101)
Ave. Stop Count	8.771*** (0.883)	8.650*** (0.864)	8.760*** (0.856)
Temperature	0.893 (0.906)	0.712 (0.865)	1.274 (0.853)
Rain	2.585** (1.237)	2.658** (1.204)	2.304* (1.178)
Snow	0.040 (1.830)	−0.178 (1.749)	1.009 (1.717)
North I-376 (Inbound)	−0.030 (0.040)	−0.031 (0.039)	−0.031 (0.039)
South I-376 (Outbound)	0.080** (0.038)	0.073** (0.036)	0.073** (0.035)
South I-279 (Inbound)	0.020 (0.050)	0.011 (0.048)	0.016 (0.048)
North I-279 (Outbound)	−0.051 (0.099)	−0.038 (0.096)	−0.019 (0.095)
West I-376 (Inbound)	0.033 (0.087)	0.027 (0.081)	0.004 (0.079)
East I-376 (Outbound)	0.048 (0.094)	0.065 (0.092)	0.101 (0.092)
Observations	896	942	964
R ²	0.459	0.458	0.462
Adjusted R ²	0.435	0.436	0.440

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 3: Regression results for University of Pittsburgh

	Carnegie Mellon (Weekday 7am-10am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−5.605 (3.412)	−5.186 (3.150)	−4.642 (3.238)
Surge Indicator	0.127 (0.543)	−0.080 (0.495)	−0.175 (0.562)
Bus Count	0.759*** (0.061)	0.730*** (0.058)	0.713*** (0.059)
Ave. Stop Count	1.007*** (0.233)	1.075*** (0.220)	1.146*** (0.223)
Temperature	0.891*** (0.335)	0.665** (0.310)	0.722** (0.316)
Rain	0.450 (0.471)	0.366 (0.444)	0.137 (0.439)
Snow	2.324*** (0.743)	1.951*** (0.657)	2.116*** (0.675)
North I-376 (Inbound)	0.002 (0.015)	−0.001 (0.014)	−0.002 (0.014)
South I-376 (Outbound)	−0.017 (0.014)	−0.017 (0.013)	−0.022* (0.013)
South I-279 (Inbound)	−0.009 (0.019)	−0.015 (0.018)	−0.012 (0.018)
North I-279 (Outbound)	0.060 (0.036)	0.051 (0.035)	0.048 (0.035)
West I-376 (Inbound)	0.032 (0.031)	0.027 (0.028)	0.027 (0.028)
East I-376 (Outbound)	0.061 (0.038)	0.070** (0.033)	0.064* (0.035)
Observations	768	827	849
R ²	0.315	0.307	0.303
Adjusted R ²	0.279	0.274	0.270
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 4: Regression results for Carnegie Mellon

Wilkinsburg (Weekday 7am-10am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	17.359 (19.308)	17.672 (18.834)	17.105 (18.988)
Surge Indicator	-2.510 (3.334)	-3.085 (3.406)	-1.723 (3.749)
Bus Count	4.069*** (0.220)	3.999*** (0.210)	4.023*** (0.213)
Ave. Stop Count	0.044 (0.810)	0.317 (0.784)	0.425 (0.791)
Temperature	0.455 (1.626)	0.323 (1.573)	0.325 (1.582)
Rain	2.458 (2.222)	2.694 (2.157)	2.385 (2.163)
Snow	-0.205 (3.270)	1.100 (3.028)	2.111 (3.056)
North I-376 (Inbound)	-0.003 (0.077)	0.002 (0.073)	0.014 (0.074)
South I-376 (Outbound)	-0.128* (0.069)	-0.156** (0.067)	-0.134** (0.066)
South I-279 (Inbound)	-0.125 (0.090)	-0.091 (0.087)	-0.079 (0.089)
North I-279 (Outbound)	0.212 (0.186)	0.174 (0.179)	0.161 (0.177)
West I-376 (Inbound)	0.042 (0.153)	0.020 (0.149)	-0.010 (0.150)
East I-376 (Outbound)	-0.001 (0.212)	-0.031 (0.210)	-0.047 (0.212)
ES_Eastbound	-0.576** (0.240)	-0.476** (0.234)	-0.379 (0.233)
ES_Westbound	-0.113 (0.288)	-0.042 (0.280)	-0.068 (0.285)
Observations	1,069	1,127	1,156
R ²	0.678	0.677	0.668
Adjusted R ²	0.665	0.665	0.656

Note: *p<0.1; **p<0.05; ***p<0.01

Table 5: Regression results for Wilkinsburg

	South Side (Weekday 7am-10am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−5.220 (4.589)	−7.768* (4.478)	−8.354* (4.485)
Surge Indicator	−0.253 (1.004)	−1.084 (1.007)	−0.001 (1.032)
Bus Count	2.650*** (0.125)	2.573*** (0.123)	2.551*** (0.122)
Ave. Stop Count	1.137*** (0.112)	1.169*** (0.110)	1.167*** (0.109)
Temperature	0.136 (0.440)	0.092 (0.430)	0.196 (0.430)
Rain	0.702 (0.601)	0.912 (0.589)	0.773 (0.584)
Snow	0.718 (0.815)	0.664 (0.782)	0.689 (0.784)
North I-376 (Inbound)	−0.025 (0.020)	−0.023 (0.020)	−0.021 (0.020)
South I-376 (Outbound)	−0.030* (0.018)	−0.022 (0.018)	−0.025 (0.018)
South I-279 (Inbound)	−0.018 (0.026)	−0.014 (0.025)	−0.008 (0.025)
North I-279 (Outbound)	−0.071 (0.050)	−0.038 (0.049)	−0.035 (0.049)
West I-376 (Inbound)	0.058 (0.046)	0.076* (0.044)	0.086** (0.042)
East I-376 (Outbound)	0.039 (0.053)	0.019 (0.052)	0.013 (0.052)
Observations	1,182	1,238	1,253
R ²	0.460	0.450	0.457
Adjusted R ²	0.442	0.432	0.440
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 6: Regression results for South Side

	North Side (Weekday 7am-10am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−3.602 (3.464)	−2.782 (3.416)	−4.003 (3.371)
Surge Indicator	−0.566 (0.886)	−0.836 (0.808)	−1.340 (0.934)
Bus Count	1.382*** (0.069)	1.386*** (0.068)	1.380*** (0.067)
Ave. Stop Count	1.054*** (0.115)	1.070*** (0.113)	1.098*** (0.113)
Temperature	0.092 (0.332)	−0.033 (0.327)	0.025 (0.326)
Rain	0.147 (0.454)	0.096 (0.449)	−0.095 (0.444)
Snow	−0.188 (0.583)	−0.218 (0.580)	−0.048 (0.584)
North I-376 (Inbound)	−0.026* (0.015)	−0.028* (0.015)	−0.033** (0.015)
South I-376 (Outbound)	−0.002 (0.014)	−0.009 (0.014)	0.0001 (0.014)
South I-279 (Inbound)	−0.032* (0.019)	−0.033* (0.019)	−0.034* (0.019)
North I-279 (Outbound)	−0.022 (0.037)	−0.027 (0.037)	−0.020 (0.036)
West I-376 (Inbound)	0.018 (0.036)	0.015 (0.035)	0.015 (0.033)
East I-376 (Outbound)	−0.002 (0.038)	−0.002 (0.038)	0.009 (0.038)
Observations	1,284	1,328	1,354
R ²	0.460	0.450	0.448
Adjusted R ²	0.444	0.433	0.432

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 7: Regression results for North Side

Strip District (Weekday 7am-10am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−0.015 (1.436)	0.030 (1.377)	0.005 (1.358)
Surge Indicator	−0.555* (0.320)	−0.190 (0.317)	0.036 (0.305)
Bus Count	0.298*** (0.034)	0.305*** (0.033)	0.299*** (0.033)
Ave. Stop Count	0.299*** (0.085)	0.323*** (0.082)	0.333*** (0.081)
Temperature	−0.102 (0.132)	−0.088 (0.127)	−0.066 (0.125)
Rain	0.124 (0.187)	0.080 (0.174)	0.120 (0.173)
Snow	−0.228 (0.239)	−0.253 (0.227)	−0.186 (0.221)
North I-376 (Inbound)	−0.004 (0.006)	−0.006 (0.006)	−0.006 (0.006)
South I-376 (Outbound)	−0.016*** (0.005)	−0.013** (0.005)	−0.014*** (0.005)
South I-279 (Inbound)	−0.002 (0.007)	−0.001 (0.007)	−0.003 (0.007)
North I-279 (Outbound)	0.003 (0.015)	0.002 (0.014)	0.007 (0.014)
West I-376 (Inbound)	−0.005 (0.014)	−0.008 (0.013)	−0.007 (0.013)
East I-376 (Outbound)	0.002 (0.015)	−0.001 (0.015)	−0.002 (0.015)
DT_Liberty_East	−0.025 (0.023)	−0.017 (0.022)	−0.018 (0.022)
DT_PENN_East	0.030 (0.027)	0.020 (0.025)	0.013 (0.025)
DT_Liberty_West	−0.003 (0.012)	−0.0001 (0.012)	0.001 (0.012)
Observations	1,183	1,219	1,242
R ²	0.158	0.164	0.163
Adjusted R ²	0.128	0.135	0.134

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 8: Regression results for Strip District

	Shadyside (Weekday 7am-10am)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	1.159 (12.013)	3.044 (11.750)	3.010 (11.378)
Surge Indicator	3.250** (1.443)	2.210 (1.458)	0.923 (1.536)
Bus Count	4.798*** (0.296)	4.811*** (0.287)	4.922*** (0.277)
Ave. Stop Count	1.806*** (0.345)	1.775*** (0.338)	1.876*** (0.324)
Temperature	-0.221 (1.093)	0.167 (1.031)	0.265 (0.984)
Rain	-1.199 (1.517)	-1.748 (1.505)	-2.143 (1.417)
Snow	-2.337 (2.021)	-2.250 (1.888)	-2.651 (1.849)
North I-376 (Inbound)	-0.008 (0.045)	-0.007 (0.044)	0.001 (0.043)
South I-376 (Outbound)	-0.016 (0.043)	0.010 (0.043)	-0.004 (0.041)
South I-279 (Inbound)	-0.101* (0.061)	-0.087 (0.059)	-0.080 (0.058)
North I-279 (Outbound)	0.059 (0.122)	-0.029 (0.118)	-0.019 (0.113)
West I-376 (Inbound)	-0.012 (0.103)	-0.030 (0.097)	-0.067 (0.095)
East I-376 (Outbound)	-0.120 (0.124)	-0.115 (0.122)	-0.122 (0.116)
ES_Eastbound	-0.100 (0.149)	0.017 (0.145)	0.015 (0.139)
ES_Westbound	-0.041 (0.188)	-0.055 (0.186)	0.006 (0.178)
Observations	777	847	877
R ²	0.458	0.453	0.451
Adjusted R ²	0.429	0.425	0.425
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 9: Regression results for Shadyside

	East Liberty (Weekday 7am-10am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	9.915 (15.326)	17.132 (14.531)	8.693 (14.440)
Surge Indicator	-1.354 (1.794)	1.588 (1.779)	2.877 (1.886)
Bus Count	2.764*** (0.157)	2.823*** (0.152)	2.928*** (0.152)
Ave. Stop Count	0.222 (0.856)	-0.205 (0.828)	0.118 (0.811)
Temperature	-0.581 (1.324)	-0.135 (1.245)	0.340 (1.208)
Rain	-1.116 (1.900)	-0.541 (1.795)	-0.137 (1.743)
Snow	-1.581 (2.749)	-1.693 (2.455)	-1.889 (2.356)
North I-376 (Inbound)	-0.077 (0.055)	-0.092* (0.054)	-0.078 (0.053)
South I-376 (Outbound)	-0.011 (0.050)	0.004 (0.050)	0.016 (0.049)
South I-279 (Inbound)	-0.006 (0.076)	-0.027 (0.071)	-0.022 (0.071)
North I-279 (Outbound)	0.071 (0.146)	-0.032 (0.139)	0.050 (0.136)
West I-376 (Inbound)	0.020 (0.131)	0.053 (0.120)	0.048 (0.117)
East I-376 (Outbound)	-0.232 (0.150)	-0.275* (0.147)	-0.271* (0.147)
ES_Eastbound	-0.068 (0.181)	-0.119 (0.174)	-0.072 (0.171)
ES_Westbound	-0.126 (0.229)	-0.107 (0.220)	-0.156 (0.218)
Observations	769	840	878
R ²	0.639	0.633	0.631
Adjusted R ²	0.619	0.614	0.613
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 10: Regression results for East Liberty

By observation, one significant result for the surge treatment variable for both CONSOL Energy Center and Shadyside can be observed. However, the inconsistency in magnitude and sign of the treatment variable for the different thresholds seem to indicate that the result was random. In addition, the low R² values do not provide much confidence in the model results for these two locations during the morning peak.

1.2 Weekday Evening Peak (4pm-7pm) Results

	Benedum Center (Weekday 4pm-7pm)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	-232.451*** (53.751)	-213.371*** (52.497)	-210.059*** (52.142)
Surge Indicator	-10.878 (11.270)	-22.599* (12.767)	-17.728 (16.698)
Bus Count	13.007*** (0.342)	12.920*** (0.335)	12.881*** (0.334)
Ave. Stop Count	116.311*** (10.557)	111.705*** (10.199)	114.274*** (10.088)
Temperature	3.027 (6.162)	2.010 (5.979)	1.340 (5.994)
Rain	3.225 (9.054)	5.516 (8.681)	4.645 (8.695)
Snow	9.760 (11.733)	10.418 (11.181)	11.165 (11.285)
North I-376 (Inbound)	0.150 (0.245)	0.162 (0.240)	0.112 (0.241)
South I-376 (Outbound)	0.476* (0.263)	0.476* (0.258)	0.507* (0.260)
South I-279 (Inbound)	1.091* (0.615)	1.108* (0.602)	1.203** (0.598)
North I-279 (Outbound)	-0.576 (0.420)	-0.568 (0.417)	-0.779* (0.407)
West I-376 (Inbound)	-0.260 (0.348)	-0.179 (0.340)	0.003 (0.340)
East I-376 (Outbound)	0.130 (0.458)	-0.055 (0.452)	-0.318 (0.453)
DT_Forbes_East	0.495 (0.701)	0.242 (0.687)	0.440 (0.677)
DT_Liberty_East	-0.598 (0.895)	-0.621 (0.887)	-0.586 (0.889)
DT_PENN_East	-0.566 (1.033)	-0.340 (1.024)	-0.273 (1.001)
DT_5th_West	-0.061 (0.707)	-0.263 (0.693)	-0.323 (0.693)
DT_Liberty_West	-0.258 (0.687)	-0.398 (0.676)	-0.278 (0.678)
Observations	1,116	1,172	1,181
R ²	0.911	0.909	0.908
Adjusted R ²	0.907	0.906	0.905

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 11: Regression results for Benedum Center

CONSOL Energy Center (Weekday 4pm-7pm)			
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	1.204 (4.295)	1.061 (4.172)	0.553 (4.155)
Surge Indicator	−0.612 (1.046)	−0.579 (1.128)	0.461 (1.376)
Bus Count	1.049*** (0.070)	1.025*** (0.068)	1.055*** (0.068)
Ave. Stop Count	1.686*** (0.326)	1.592*** (0.321)	1.553*** (0.320)
Temperature	0.802 (0.533)	0.674 (0.526)	0.613 (0.525)
Rain	−0.461 (0.788)	−0.378 (0.763)	−0.435 (0.768)
Snow	1.870* (0.999)	1.603* (0.967)	1.297 (0.949)
North I-376 (Inbound)	−0.043** (0.021)	−0.030 (0.021)	−0.029 (0.021)
South I-376 (Outbound)	0.044* (0.023)	0.036 (0.023)	0.037 (0.023)
South I-279 (Inbound)	−0.016 (0.054)	−0.015 (0.053)	0.001 (0.053)
North I-279 (Outbound)	−0.027 (0.036)	−0.022 (0.035)	−0.035 (0.034)
West I-376 (Inbound)	0.047 (0.031)	0.044 (0.030)	0.042 (0.030)
East I-376 (Outbound)	0.054 (0.040)	0.061 (0.039)	0.069* (0.039)
DT_Forbes_East	−0.087 (0.062)	−0.092 (0.060)	−0.091 (0.060)
DT_Liberty_East	0.139* (0.079)	0.181** (0.078)	0.172** (0.078)
DT_PENN_East	−0.116 (0.091)	−0.157* (0.090)	−0.145 (0.090)
DT_5th_West	0.113* (0.062)	0.114* (0.061)	0.116* (0.061)
DT_Liberty_West	−0.088 (0.060)	−0.088 (0.059)	−0.091 (0.059)
Observations	1,133	1,182	1,190
R ²	0.516	0.511	0.512
Adjusted R ²	0.496	0.492	0.494

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 12: Regression results for CONSOL Energy Center

University of Pittsburgh (Weekday 4pm-7pm)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-70.480*** (21.984)	-64.128*** (20.942)	-65.162*** (20.778)
Surge Indicator	3.884 (5.450)	3.361 (5.042)	3.248 (5.239)
Bus Count	7.624*** (0.273)	7.780*** (0.261)	7.667*** (0.257)
Ave. Stop Count	36.001*** (2.543)	34.903*** (2.405)	35.041*** (2.394)
Temperature	-4.447 (3.039)	-4.702 (2.966)	-4.340 (2.927)
Rain	4.708 (3.884)	3.518 (3.794)	3.106 (3.765)
Snow	-1.194 (5.417)	1.172 (4.975)	1.837 (4.917)
North I-376 (Inbound)	0.053 (0.102)	0.052 (0.098)	0.032 (0.097)
South I-376 (Outbound)	0.128 (0.114)	0.152 (0.108)	0.152 (0.107)
South I-279 (Inbound)	0.158 (0.253)	0.118 (0.244)	0.008 (0.242)
North I-279 (Outbound)	-0.063 (0.171)	-0.080 (0.162)	-0.103 (0.158)
West I-376 (Inbound)	0.021 (0.160)	0.022 (0.153)	0.141 (0.152)
East I-376 (Outbound)	0.256 (0.219)	0.168 (0.209)	0.287 (0.208)
Observations	892	955	975
R ²	0.796	0.795	0.793
Adjusted R ²	0.787	0.786	0.784

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 13: Regression results for University of Pittsburgh

	Carnegie Mellon (Weekday 4pm-7pm)		
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-30.771*** (10.318)	-31.644*** (9.803)	-32.793*** (9.457)
Surge Indicator	0.694 (2.505)	-1.883 (2.405)	-0.837 (2.555)
Bus Count	6.093*** (0.227)	6.113*** (0.218)	5.997*** (0.216)
Ave. Stop Count	8.562*** (0.779)	8.431*** (0.747)	8.710*** (0.730)
Temperature	1.421 (1.464)	0.125 (1.404)	1.034 (1.376)
Rain	1.246 (1.847)	1.884 (1.797)	2.101 (1.754)
Snow	-0.698 (2.408)	-1.373 (2.319)	-1.281 (2.279)
North I-376 (Inbound)	0.032 (0.049)	0.024 (0.047)	0.025 (0.046)
South I-376 (Outbound)	0.026 (0.054)	0.017 (0.052)	-0.001 (0.050)
South I-279 (Inbound)	-0.006 (0.119)	0.010 (0.115)	-0.024 (0.113)
North I-279 (Outbound)	-0.168* (0.091)	-0.121 (0.083)	-0.108 (0.078)
West I-376 (Inbound)	0.085 (0.074)	0.046 (0.072)	0.079 (0.071)
East I-376 (Outbound)	0.092 (0.104)	0.096 (0.100)	0.124 (0.098)
Observations	859	925	941
R ²	0.593	0.591	0.589
Adjusted R ²	0.574	0.574	0.572

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 14: Regression results for Carnegie Mellon

Wilkinsburg (Weekday 4pm-7pm)			
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	5.961 (4.770)	8.058* (4.706)	7.851 (4.807)
Surge Indicator	-5.088*** (1.750)	-6.875*** (2.106)	-6.325* (3.702)
Bus Count	1.417*** (0.078)	1.386*** (0.077)	1.395*** (0.077)
Ave. Stop Count	0.175 (0.363)	0.169 (0.361)	0.177 (0.361)
Temperature	0.371 (0.633)	0.528 (0.627)	0.494 (0.627)
Rain	0.651 (0.894)	0.342 (0.890)	0.439 (0.892)
Snow	-0.210 (1.088)	0.098 (1.053)	0.161 (1.062)
North I-376 (Inbound)	-0.006 (0.024)	-0.0003 (0.024)	-0.001 (0.024)
South I-376 (Outbound)	0.017 (0.027)	0.012 (0.027)	0.016 (0.027)
South I-279 (Inbound)	-0.075 (0.063)	-0.103* (0.062)	-0.108* (0.062)
North I-279 (Outbound)	0.023 (0.041)	0.014 (0.040)	0.013 (0.041)
West I-376 (Inbound)	-0.043 (0.036)	-0.048 (0.036)	-0.043 (0.036)
East I-376 (Outbound)	0.013 (0.047)	0.015 (0.046)	0.022 (0.046)
ES_Eastbound	0.060 (0.106)	0.067 (0.105)	0.052 (0.106)
ES_Westbound	0.112 (0.118)	0.131 (0.117)	0.128 (0.117)
Observations	1,343	1,370	1,372
R ²	0.401	0.399	0.399
Adjusted R ²	0.382	0.381	0.381
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 15: Regression results for Wilkinsburg

	South Side (Weekday 4pm-7pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-11.337*** (3.360)	-10.411*** (3.303)	-9.702*** (3.273)
Surge Indicator	0.861 (1.048)	0.354 (1.153)	1.258 (1.374)
Bus Count	3.360*** (0.127)	3.365*** (0.125)	3.385*** (0.124)
Ave. Stop Count	1.381*** (0.123)	1.380*** (0.122)	1.361*** (0.120)
Temperature	1.095** (0.472)	0.806* (0.464)	0.725 (0.459)
Rain	-1.013 (0.690)	-0.835 (0.674)	-0.991 (0.661)
Snow	-0.767 (0.854)	-0.712 (0.829)	-0.730 (0.810)
North I-376 (Inbound)	0.028 (0.019)	0.031* (0.018)	0.030* (0.018)
South I-376 (Outbound)	-0.021 (0.021)	-0.014 (0.020)	-0.017 (0.020)
South I-279 (Inbound)	-0.004 (0.047)	-0.020 (0.046)	-0.027 (0.045)
North I-279 (Outbound)	0.047 (0.032)	0.045 (0.031)	0.034 (0.031)
West I-376 (Inbound)	0.020 (0.027)	0.010 (0.026)	0.013 (0.026)
East I-376 (Outbound)	0.004 (0.034)	0.002 (0.034)	0.013 (0.033)
Observations	1,175	1,229	1,249
R ²	0.518	0.511	0.512
Adjusted R ²	0.502	0.496	0.496

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 16: Regression results for South Side

	North Side (Weekday 4pm-7pm)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	-5.003* (2.742)	-5.005* (2.619)	-5.738** (2.569)
Surge Indicator	1.318 (0.864)	1.534* (0.897)	0.323 (0.911)
Bus Count	1.527*** (0.070)	1.530*** (0.068)	1.552*** (0.067)
Ave. Stop Count	1.170*** (0.123)	1.120*** (0.116)	1.110*** (0.115)
Temperature	0.434 (0.365)	0.376 (0.352)	0.335 (0.350)
Rain	-0.306 (0.538)	-0.405 (0.518)	-0.406 (0.513)
Snow	-0.860 (0.707)	-0.526 (0.645)	-0.539 (0.637)
North I-376 (Inbound)	-0.036** (0.015)	-0.036** (0.014)	-0.036** (0.014)
South I-376 (Outbound)	-0.010 (0.016)	-0.006 (0.015)	-0.010 (0.015)
South I-279 (Inbound)	0.071* (0.037)	0.070** (0.036)	0.080** (0.035)
North I-279 (Outbound)	0.007 (0.024)	0.009 (0.022)	0.009 (0.022)
West I-376 (Inbound)	-0.023 (0.021)	-0.025 (0.020)	-0.026 (0.020)
East I-376 (Outbound)	0.010 (0.027)	0.010 (0.026)	0.017 (0.026)
Observations	1,221	1,285	1,305
R ²	0.457	0.462	0.462
Adjusted R ²	0.439	0.445	0.446
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 17: Regression results for North Side

Strip District (Weekday 4pm-7pm)			
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	1.964 (2.033)	1.836 (2.011)	0.980 (1.949)
Surge Indicator	0.651 (0.580)	0.648 (0.575)	−0.357 (0.734)
Bus Count	0.983*** (0.063)	1.000*** (0.062)	0.996*** (0.060)
Ave. Stop Count	0.853*** (0.156)	0.892*** (0.150)	0.844*** (0.149)
Temperature	−0.219 (0.267)	−0.396 (0.260)	−0.291 (0.257)
Rain	0.130 (0.382)	0.191 (0.372)	0.184 (0.365)
Snow	−0.310 (0.484)	−0.285 (0.474)	−0.168 (0.460)
North I-376 (Inbound)	−0.005 (0.010)	−0.003 (0.010)	−0.003 (0.010)
South I-376 (Outbound)	0.011 (0.011)	0.015 (0.011)	0.015 (0.011)
South I-279 (Inbound)	−0.036 (0.027)	−0.027 (0.026)	−0.014 (0.025)
North I-279 (Outbound)	−0.0003 (0.017)	−0.010 (0.017)	−0.008 (0.017)
West I-376 (Inbound)	0.013 (0.015)	0.011 (0.015)	0.007 (0.015)
East I-376 (Outbound)	−0.003 (0.019)	−0.010 (0.018)	−0.008 (0.018)
DT_Liberty_East	−0.083** (0.039)	−0.074* (0.038)	−0.073* (0.037)
DT_PENN_East	0.064 (0.045)	0.041 (0.043)	0.039 (0.042)
DT_Liberty_West	0.031 (0.029)	0.045 (0.029)	0.052* (0.029)
Observations	1,143	1,193	1,197
R ²	0.445	0.453	0.463
Adjusted R ²	0.425	0.433	0.444

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 18: Regression results for Strip District

	Shadyside (Weekday 4pm-7pm)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	−1.850 (2.444)	−2.658 (2.276)	−3.593 (2.286)
Surge Indicator	0.009 (0.634)	−0.023 (0.635)	0.428 (0.722)
Bus Count	1.611*** (0.085)	1.632*** (0.083)	1.656*** (0.083)
Ave. Stop Count	0.863*** (0.088)	0.856*** (0.086)	0.864*** (0.086)
Temperature	0.144 (0.319)	0.172 (0.309)	0.077 (0.312)
Rain	0.033 (0.438)	0.100 (0.426)	0.230 (0.431)
Snow	−0.485 (0.532)	−0.675 (0.503)	−0.836* (0.507)
North I-376 (Inbound)	−0.0003 (0.012)	0.001 (0.012)	0.005 (0.012)
South I-376 (Outbound)	0.022 (0.014)	0.020 (0.013)	0.020 (0.013)
South I-279 (Inbound)	−0.043 (0.031)	−0.036 (0.030)	−0.031 (0.030)
North I-279 (Outbound)	−0.014 (0.022)	−0.013 (0.020)	−0.008 (0.020)
West I-376 (Inbound)	−0.012 (0.018)	−0.011 (0.017)	−0.010 (0.017)
East I-376 (Outbound)	0.043* (0.023)	0.053** (0.022)	0.048** (0.022)
ES_Eastbound	−0.043 (0.052)	−0.069 (0.051)	−0.070 (0.051)
ES_Westbound	0.018 (0.060)	0.021 (0.058)	0.028 (0.058)
Observations	1,071	1,130	1,143
R ²	0.377	0.381	0.377
Adjusted R ²	0.353	0.358	0.355
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 19: Regression results for Shadydside

	East Liberty (Weekday 4pm-7pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−4.112 (6.167)	−2.788 (6.033)	−0.805 (5.950)
Surge Indicator	0.665 (1.706)	2.419 (1.943)	5.696*** (2.121)
Bus Count	2.157*** (0.093)	2.177*** (0.091)	2.173*** (0.090)
Ave. Stop Count	5.699*** (0.610)	6.005*** (0.600)	6.044*** (0.596)
Temperature	1.334 (0.859)	1.820** (0.835)	1.942** (0.829)
Rain	−0.537 (1.151)	−1.119 (1.134)	−1.222 (1.127)
Snow	0.833 (1.415)	0.705 (1.374)	0.919 (1.364)
North I-376 (Inbound)	−0.014 (0.033)	0.0001 (0.032)	−0.002 (0.032)
South I-376 (Outbound)	−0.034 (0.037)	−0.052 (0.036)	−0.052 (0.036)
South I-279 (Inbound)	−0.059 (0.081)	−0.096 (0.080)	−0.108 (0.079)
North I-279 (Outbound)	0.060 (0.054)	0.055 (0.052)	0.049 (0.051)
West I-376 (Inbound)	−0.003 (0.047)	0.0003 (0.047)	−0.020 (0.046)
East I-376 (Outbound)	0.012 (0.060)	0.018 (0.059)	0.026 (0.058)
ES_Eastbound	−0.191 (0.139)	−0.211 (0.136)	−0.218 (0.135)
ES_Westbound	0.111 (0.158)	0.123 (0.155)	0.119 (0.155)
Observations	1,163	1,214	1,237
R ²	0.554	0.549	0.548
Adjusted R ²	0.538	0.534	0.533

Note: *p<0.1; **p<0.05; ***p<0.01

Table 20: Regression results for East Liberty

1.3 Weekday Late Night (7pm-12am) Results

	Benedum Center (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	−26.991 (24.783)	−27.875 (24.213)	−26.695 (23.782)
Surge Indicator	−1.900 (5.952)	−1.500 (6.166)	5.464 (7.285)
Bus Count	7.232*** (0.274)	7.241*** (0.260)	7.282*** (0.258)
Ave. Stop Count	18.492*** (2.466)	18.172*** (2.378)	17.704*** (2.385)
Temperature	10.130*** (2.493)	9.515*** (2.387)	9.337*** (2.399)
Rain	−6.341 (4.143)	−5.483 (3.828)	−4.443 (3.858)
Snow	−3.788 (5.377)	−4.741 (5.169)	−5.150 (5.070)
North I-376 (Inbound)	−0.001 (0.142)	−0.024 (0.140)	−0.004 (0.139)
South I-376 (Outbound)	0.030 (0.242)	0.012 (0.230)	−0.083 (0.227)
South I-279 (Inbound)	−0.097 (0.190)	−0.086 (0.184)	−0.025 (0.181)
North I-279 (Outbound)	−0.326 (0.219)	−0.304 (0.211)	−0.235 (0.210)
West I-376 (Inbound)	−0.012 (0.259)	0.026 (0.251)	0.052 (0.247)
East I-376 (Outbound)	0.059 (0.244)	0.040 (0.237)	−0.024 (0.233)
DT_Forbess_East	0.062 (0.192)	0.095 (0.185)	0.058 (0.183)
DT_Liberty_East	−0.201 (0.244)	−0.220 (0.237)	−0.229 (0.239)
DT_PENN_East	0.091 (0.253)	0.077 (0.247)	0.102 (0.251)
DT_5th_West	−0.139 (0.204)	−0.167 (0.194)	−0.153 (0.192)
DT_Liberty_West	−0.035 (0.179)	−0.052 (0.175)	−0.076 (0.175)
Observations	881	935	957
R ²	0.699	0.695	0.693
Adjusted R ²	0.679	0.676	0.675

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 21: Regression results for Benedum Center

CONSOL Energy Center (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−15.589*** (5.031)	−14.261*** (4.480)	−13.548*** (4.414)
Surge Indicator	1.945 (1.281)	1.676 (1.338)	0.106 (1.485)
Bus Count	1.166*** (0.091)	1.154*** (0.086)	1.170*** (0.084)
Ave. Stop Count	0.135 (0.258)	0.214 (0.246)	0.332 (0.242)
Temperature	0.237 (0.492)	0.308 (0.475)	0.227 (0.469)
Rain	0.298 (0.799)	0.359 (0.771)	0.484 (0.753)
Snow	0.273 (1.069)	0.655 (1.018)	0.731 (0.973)
North I-376 (Inbound)	−0.003 (0.029)	0.002 (0.028)	0.009 (0.028)
South I-376 (Outbound)	0.043 (0.049)	0.021 (0.045)	0.008 (0.045)
South I-279 (Inbound)	−0.027 (0.038)	−0.022 (0.037)	−0.033 (0.036)
North I-279 (Outbound)	0.118*** (0.044)	0.115*** (0.042)	0.117*** (0.041)
West I-376 (Inbound)	0.120** (0.052)	0.117** (0.049)	0.115** (0.048)
East I-376 (Outbound)	−0.004 (0.049)	−0.011 (0.047)	−0.013 (0.047)
DT_Forbis_East	0.028 (0.039)	0.028 (0.037)	0.013 (0.037)
DT_Liberty_East	−0.012 (0.049)	−0.015 (0.048)	−0.021 (0.047)
DT_PENN_East	−0.002 (0.051)	−0.001 (0.051)	0.008 (0.050)
DT_5th_West	−0.104** (0.040)	−0.098** (0.039)	−0.095** (0.038)
DT_Liberty_West	0.021 (0.036)	0.028 (0.035)	0.027 (0.035)
Observations	906	951	963
R ²	0.267	0.270	0.280
Adjusted R ²	0.220	0.225	0.236

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 22: Regression results for CONSOL Energy Center

University of Pittsburgh (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-37.585*** (11.470)	-39.612*** (11.131)	-39.804*** (11.108)
Surge Indicator	5.040* (2.615)	4.671 (3.022)	8.886*** (3.376)
Bus Count	4.913*** (0.160)	4.865*** (0.158)	4.853*** (0.156)
Ave. Stop Count	9.651*** (0.661)	9.464*** (0.649)	9.577*** (0.650)
Temperature	-2.110** (1.058)	-2.490** (1.029)	-2.462** (1.028)
Rain	0.472 (1.730)	0.874 (1.694)	0.610 (1.691)
Snow	4.828** (2.384)	5.754** (2.308)	5.482** (2.311)
North I-376 (Inbound)	0.025 (0.066)	0.051 (0.065)	0.061 (0.064)
South I-376 (Outbound)	0.093 (0.090)	0.075 (0.087)	0.055 (0.087)
South I-279 (Inbound)	0.173** (0.077)	0.180** (0.075)	0.193*** (0.074)
North I-279 (Outbound)	-0.013 (0.089)	-0.005 (0.087)	0.004 (0.087)
West I-376 (Inbound)	0.016 (0.104)	0.010 (0.102)	0.029 (0.102)
East I-376 (Outbound)	0.066 (0.102)	0.076 (0.100)	0.053 (0.100)
Observations	1,567	1,625	1,638
R ²	0.695	0.694	0.693
Adjusted R ²	0.685	0.684	0.683

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 23: Regression results for University of Pittsburgh

Carnegie Mellon (Weekday 7pm-12am)			
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−4.773 (6.603)	−4.908 (6.495)	−5.232 (6.415)
Surge Indicator	0.479 (1.552)	−1.055 (1.838)	−0.694 (2.054)
Bus Count	4.824*** (0.174)	4.799*** (0.171)	4.837*** (0.170)
Ave. Stop Count	4.766*** (0.295)	4.691*** (0.288)	4.678*** (0.287)
Temperature	−0.879 (0.623)	−0.718 (0.610)	−0.697 (0.607)
Rain	−0.279 (1.026)	0.021 (1.000)	0.005 (0.997)
Snow	−0.436 (1.383)	−0.589 (1.362)	−0.684 (1.365)
North I-376 (Inbound)	0.063 (0.040)	0.043 (0.038)	0.042 (0.038)
South I-376 (Outbound)	0.080 (0.053)	0.079 (0.052)	0.058 (0.051)
South I-279 (Inbound)	0.024 (0.045)	0.025 (0.044)	0.025 (0.044)
North I-279 (Outbound)	−0.036 (0.052)	−0.035 (0.051)	−0.033 (0.051)
West I-376 (Inbound)	−0.087 (0.060)	−0.075 (0.060)	−0.073 (0.059)
East I-376 (Outbound)	−0.094 (0.060)	−0.088 (0.059)	−0.071 (0.059)
Observations	1,511	1,557	1,578
R ²	0.517	0.517	0.517
Adjusted R ²	0.501	0.501	0.501
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 24: Regression results for Carnegie Mellon

Wilkinsburg (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-9.265** (4.556)	-8.816** (4.465)	-9.341** (4.438)
Surge Indicator	0.773 (1.977)	-0.859 (2.099)	-0.856 (2.093)
Bus Count	1.441*** (0.093)	1.413*** (0.091)	1.408*** (0.090)
Ave. Stop Count	-0.259* (0.140)	-0.256* (0.137)	-0.255* (0.136)
Temperature	0.465 (0.422)	0.416 (0.413)	0.389 (0.411)
Rain	-1.086 (0.672)	-0.984 (0.669)	-1.006 (0.661)
Snow	-0.262 (0.840)	-0.329 (0.808)	-0.435 (0.804)
North I-376 (Inbound)	0.032 (0.028)	0.037 (0.027)	0.036 (0.027)
South I-376 (Outbound)	-0.031 (0.042)	-0.047 (0.041)	-0.041 (0.040)
South I-279 (Inbound)	0.021 (0.034)	0.014 (0.034)	0.013 (0.032)
North I-279 (Outbound)	-0.026 (0.039)	-0.020 (0.039)	-0.015 (0.038)
West I-376 (Inbound)	0.097** (0.047)	0.108** (0.046)	0.104** (0.045)
East I-376 (Outbound)	0.035 (0.044)	0.038 (0.043)	0.044 (0.043)
ES_Eastbound	0.029 (0.050)	0.023 (0.048)	0.032 (0.048)
ES_Westbound	0.072 (0.069)	0.055 (0.069)	0.045 (0.068)
Observations	1,185	1,209	1,221
R ²	0.390	0.392	0.391
Adjusted R ²	0.362	0.364	0.364
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 25: Regression results for Wilkinsburg

	South Side (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−1.392 (2.470)	−2.265 (2.437)	−1.933 (2.425)
Surge Indicator	0.192 (0.608)	−0.263 (0.724)	−0.279 (0.884)
Bus Count	2.728*** (0.111)	2.700*** (0.109)	2.641*** (0.109)
Ave. Stop Count	0.646*** (0.058)	0.625*** (0.057)	0.639*** (0.057)
Temperature	0.800*** (0.248)	0.755*** (0.244)	0.726*** (0.245)
Rain	−0.510 (0.410)	−0.569 (0.399)	−0.745* (0.400)
Snow	−0.669 (0.564)	−0.792 (0.550)	−0.819 (0.546)
North I-376 (Inbound)	−0.007 (0.016)	−0.007 (0.016)	−0.006 (0.016)
South I-376 (Outbound)	−0.023 (0.023)	−0.012 (0.023)	−0.008 (0.023)
South I-279 (Inbound)	−0.016 (0.019)	−0.017 (0.018)	−0.018 (0.018)
North I-279 (Outbound)	−0.006 (0.022)	−0.007 (0.022)	−0.011 (0.022)
West I-376 (Inbound)	0.004 (0.026)	0.003 (0.025)	−0.005 (0.025)
East I-376 (Outbound)	−0.028 (0.025)	−0.020 (0.024)	−0.017 (0.024)
Observations	1,782	1,846	1,859
R ²	0.424	0.421	0.411
Adjusted R ²	0.408	0.405	0.395

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 26: Regression results for South Side

	North Side (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	0.404 (1.734)	0.449 (1.684)	0.023 (1.662)
Surge Indicator	−0.921** (0.414)	−0.218 (0.458)	−0.092 (0.514)
Bus Count	1.138*** (0.060)	1.136*** (0.059)	1.120*** (0.058)
Ave. Stop Count	0.269*** (0.044)	0.271*** (0.043)	0.264*** (0.043)
Temperature	−0.095 (0.171)	−0.133 (0.167)	−0.099 (0.165)
Rain	0.052 (0.283)	0.075 (0.277)	0.049 (0.272)
Snow	−0.192 (0.402)	−0.304 (0.376)	−0.214 (0.379)
North I-376 (Inbound)	−0.005 (0.011)	−0.004 (0.011)	−0.004 (0.011)
South I-376 (Outbound)	−0.006 (0.016)	−0.008 (0.016)	−0.003 (0.015)
South I-279 (Inbound)	−0.004 (0.013)	−0.002 (0.013)	−0.001 (0.013)
North I-279 (Outbound)	−0.016 (0.015)	−0.023 (0.015)	−0.018 (0.015)
West I-376 (Inbound)	0.011 (0.018)	0.015 (0.017)	0.013 (0.017)
East I-376 (Outbound)	−0.008 (0.017)	−0.006 (0.017)	−0.005 (0.017)
Observations	1,783	1,859	1,887
R ²	0.323	0.321	0.319
Adjusted R ²	0.304	0.302	0.301

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 27: Regression results for North Side

	Strip District (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−0.587 (1.079)	−1.047 (1.059)	−0.869 (1.046)
Surge Indicator	0.223 (0.323)	0.730** (0.360)	0.382 (0.369)
Bus Count	0.385*** (0.040)	0.394*** (0.039)	0.401*** (0.039)
Ave. Stop Count	0.196*** (0.062)	0.194*** (0.060)	0.198*** (0.060)
Temperature	0.118 (0.108)	0.084 (0.107)	0.086 (0.107)
Rain	−0.060 (0.179)	0.0004 (0.178)	−0.066 (0.178)
Snow	0.035 (0.234)	−0.131 (0.220)	−0.226 (0.217)
North I-376 (Inbound)	0.004 (0.007)	0.006 (0.007)	0.003 (0.007)
South I-376 (Outbound)	−0.005 (0.010)	−0.001 (0.010)	−0.002 (0.010)
South I-279 (Inbound)	−0.006 (0.008)	−0.006 (0.008)	−0.008 (0.008)
North I-279 (Outbound)	0.002 (0.010)	0.003 (0.009)	0.006 (0.009)
West I-376 (Inbound)	−0.0002 (0.011)	−0.002 (0.011)	−0.001 (0.011)
East I-376 (Outbound)	−0.001 (0.011)	0.002 (0.010)	−0.001 (0.010)
DT_Liberty_East	−0.004 (0.011)	−0.006 (0.011)	−0.001 (0.011)
DT_PENN_East	0.013 (0.012)	0.014 (0.012)	0.011 (0.012)
DT_Liberty_West	−0.013 (0.008)	−0.010 (0.008)	−0.009 (0.008)
Observations	1,052	1,089	1,103
R ²	0.225	0.223	0.214
Adjusted R ²	0.184	0.183	0.175

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 28: Regression results for Strip District

	Shadyside (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	3.251 (2.564)	4.085 (2.568)	3.865 (2.539)
Surge Indicator	−0.348 (0.828)	0.132 (0.931)	0.160 (0.932)
Bus Count	0.996*** (0.080)	0.978*** (0.082)	0.973*** (0.081)
Ave. Stop Count	0.387*** (0.061)	0.403*** (0.061)	0.407*** (0.061)
Temperature	0.0001 (0.219)	−0.003 (0.221)	0.010 (0.219)
Rain	0.197 (0.345)	0.105 (0.350)	0.015 (0.340)
Snow	−0.425 (0.472)	−0.494 (0.462)	−0.503 (0.452)
North I-376 (Inbound)	−0.003 (0.015)	−0.005 (0.015)	−0.002 (0.014)
South I-376 (Outbound)	−0.013 (0.022)	−0.008 (0.022)	−0.006 (0.022)
South I-279 (Inbound)	−0.036* (0.019)	−0.041** (0.019)	−0.044** (0.019)
North I-279 (Outbound)	0.013 (0.021)	−0.004 (0.021)	−0.002 (0.021)
West I-376 (Inbound)	−0.014 (0.024)	−0.009 (0.024)	−0.010 (0.024)
East I-376 (Outbound)	−0.011 (0.023)	−0.009 (0.023)	−0.008 (0.023)
ES_Eastbound	−0.028 (0.026)	−0.027 (0.026)	−0.025 (0.026)
ES_Westbound	0.007 (0.034)	0.009 (0.035)	0.008 (0.035)
Observations	993	1,040	1,054
R ²	0.247	0.232	0.233
Adjusted R ²	0.205	0.192	0.193

Note: *p<0.1; **p<0.05; ***p<0.01

Table 29: Regression results for Shadyside

	East Liberty (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	0.428 (5.366)	-0.126 (5.143)	0.063 (5.128)
Surge Indicator	-2.949 (1.794)	-2.674* (1.601)	-3.322* (1.907)
Bus Count	1.889*** (0.092)	1.862*** (0.090)	1.874*** (0.089)
Ave. Stop Count	0.145 (0.190)	0.140 (0.185)	0.133 (0.184)
Temperature	0.430 (0.462)	0.473 (0.446)	0.493 (0.443)
Rain	-1.171 (0.726)	-1.043 (0.712)	-1.040 (0.700)
Snow	-1.373 (0.957)	-1.329 (0.903)	-1.290 (0.909)
North I-376 (Inbound)	-0.006 (0.031)	-0.009 (0.030)	-0.008 (0.029)
South I-376 (Outbound)	0.037 (0.045)	0.045 (0.044)	0.047 (0.044)
South I-279 (Inbound)	-0.050 (0.039)	-0.050 (0.038)	-0.048 (0.037)
North I-279 (Outbound)	0.015 (0.044)	0.027 (0.042)	0.022 (0.042)
West I-376 (Inbound)	0.014 (0.052)	0.002 (0.050)	0.004 (0.050)
East I-376 (Outbound)	0.004 (0.047)	0.005 (0.046)	0.002 (0.046)
ES_Eastbound	0.021 (0.055)	0.029 (0.054)	0.028 (0.053)
ES_Westbound	-0.078 (0.074)	-0.085 (0.072)	-0.098 (0.072)
Observations	1,118	1,156	1,165
R ²	0.469	0.469	0.473
Adjusted R ²	0.443	0.444	0.448
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 30: Regression results for East Liberty

1.4 Weekend Evenings (5pm-10pm) Results

	Benedum Center (Weekend 5pm-10pm)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	-46.233 (32.112)	-45.682 (30.962)	-39.319 (30.879)
Surge Indicator	-2.598 (6.130)	0.408 (6.124)	2.982 (7.013)
Bus Count	6.792*** (0.389)	6.767*** (0.375)	6.870*** (0.371)
Ave. Stop Count	19.444*** (2.817)	20.474*** (2.711)	20.215*** (2.694)
Temperature	12.099*** (2.968)	14.123*** (2.830)	13.805*** (2.819)
Rain	-4.615 (8.916)	-9.765 (7.623)	-9.419 (7.596)
Snow	1.031 (13.491)	4.121 (9.674)	6.446 (10.251)
North I-376 (Inbound)	-0.165 (0.128)	-0.172 (0.124)	-0.207* (0.123)
South I-376 (Outbound)	-0.218 (0.240)	-0.371 (0.239)	-0.390 (0.239)
South I-279 (Inbound)	0.382 (0.287)	0.305 (0.275)	0.311 (0.273)
North I-279 (Outbound)	0.172 (0.301)	0.195 (0.288)	0.183 (0.286)
West I-376 (Inbound)	0.056 (0.261)	0.104 (0.257)	0.078 (0.257)
East I-376 (Outbound)	0.288* (0.160)	0.373** (0.157)	0.329** (0.156)
DT_Forbess_East	-0.669** (0.282)	-0.634** (0.271)	-0.618** (0.269)
DT_Liberty_East	-0.548 (0.337)	-0.377 (0.325)	-0.387 (0.317)
DT_PENN_East	0.315 (0.406)	0.033 (0.395)	0.056 (0.376)
DT_5th_West	0.117 (0.269)	0.326 (0.269)	0.316 (0.265)
DT_Liberty_West	0.287 (0.254)	0.259 (0.247)	0.247 (0.246)
Observations	575	602	607
R ²	0.657	0.669	0.673
Adjusted R ²	0.623	0.638	0.642

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 31: Regression results for Benedum Center

University of Pittsburgh (Weekend 5pm-10pm)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-14.092 (10.743)	-19.945* (10.411)	-16.145 (10.789)
Surge Indicator	2.884 (2.321)	0.214 (2.267)	-1.267 (2.686)
Bus Count	3.922*** (0.215)	3.954*** (0.212)	4.051*** (0.215)
Ave. Stop Count	6.550*** (0.750)	6.392*** (0.722)	6.604*** (0.744)
Temperature	1.019 (1.171)	1.201 (1.131)	1.030 (1.165)
Rain	1.632 (2.327)	1.395 (2.298)	1.363 (2.387)
Snow	-1.147 (2.503)	-0.613 (2.495)	-0.991 (2.445)
North I-376 (Inbound)	0.069 (0.054)	0.026 (0.052)	0.043 (0.052)
South I-376 (Outbound)	-0.093 (0.089)	-0.067 (0.083)	-0.042 (0.086)
South I-279 (Inbound)	-0.036 (0.092)	-0.005 (0.088)	-0.051 (0.091)
North I-279 (Outbound)	-0.044 (0.106)	0.028 (0.104)	-0.009 (0.107)
West I-376 (Inbound)	0.133 (0.096)	0.148 (0.093)	0.134 (0.096)
East I-376 (Outbound)	-0.013 (0.064)	-0.007 (0.061)	-0.004 (0.063)
Observations	704	747	768
R ²	0.563	0.564	0.557
Adjusted R ²	0.531	0.535	0.528

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 32: Regression results for University of Pittsburgh

	Carnegie Mellon (Weekend 5pm-10pm)		
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-20.162** (8.638)	-14.684* (8.009)	-15.392* (7.990)
Surge Indicator	3.836** (1.661)	4.555** (1.853)	4.776** (1.901)
Bus Count	4.436*** (0.269)	4.437*** (0.258)	4.465*** (0.252)
Ave. Stop Count	4.479*** (0.437)	4.334*** (0.404)	4.442*** (0.404)
Temperature	0.098 (0.952)	0.186 (0.897)	0.218 (0.895)
Rain	2.969 (1.837)	2.698 (1.737)	2.913* (1.744)
Snow	0.130 (1.984)	0.293 (1.884)	0.930 (1.851)
North I-376 (Inbound)	0.074* (0.043)	0.096** (0.041)	0.097** (0.040)
South I-376 (Outbound)	0.088 (0.065)	0.085 (0.062)	0.068 (0.062)
South I-279 (Inbound)	0.013 (0.075)	-0.020 (0.070)	-0.025 (0.069)
North I-279 (Outbound)	0.018 (0.084)	-0.025 (0.080)	-0.022 (0.079)
West I-376 (Inbound)	-0.123* (0.072)	-0.132* (0.069)	-0.125* (0.069)
East I-376 (Outbound)	0.044 (0.052)	0.048 (0.049)	0.065 (0.048)
Observations	615	645	670
R ²	0.542	0.543	0.537
Adjusted R ²	0.504	0.507	0.502

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 33: Regression results for Carnegie Mellon

Wilkinsburg (Weekend 5pm-10pm)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	6.876 (7.369)	7.916 (6.995)	6.768 (6.778)
Surge Indicator	0.248 (1.514)	-0.538 (1.524)	0.356 (1.592)
Bus Count	2.467*** (0.188)	2.412*** (0.175)	2.394*** (0.172)
Ave. Stop Count	-0.529*** (0.188)	-0.532*** (0.183)	-0.557*** (0.179)
Temperature	1.724** (0.726)	1.701** (0.690)	1.717** (0.681)
Rain	0.323 (1.720)	1.046 (1.656)	0.887 (1.697)
Snow	-0.295 (1.925)	0.473 (1.785)	0.183 (1.843)
North I-376 (Inbound)	-0.058* (0.032)	-0.058* (0.030)	-0.056* (0.029)
South I-376 (Outbound)	0.035 (0.051)	0.028 (0.050)	0.027 (0.049)
South I-279 (Inbound)	0.020 (0.065)	0.019 (0.063)	0.032 (0.061)
North I-279 (Outbound)	-0.061 (0.073)	-0.048 (0.069)	-0.046 (0.068)
West I-376 (Inbound)	0.007 (0.061)	-0.015 (0.059)	-0.010 (0.058)
East I-376 (Outbound)	0.007 (0.040)	0.003 (0.039)	0.001 (0.038)
ES_Eastbound	0.140 (0.086)	0.123 (0.081)	0.133* (0.079)
ES_Westbound	-0.096 (0.105)	-0.052 (0.103)	-0.063 (0.105)
Observations	565	608	617
R ²	0.442	0.443	0.441
Adjusted R ²	0.389	0.394	0.392

Note: *p<0.1; **p<0.05; ***p<0.01

Table 34: Regression results for Wilkinsburg

	South Side (Weekend 5pm-10pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−6.838 (4.395)	−6.550 (4.228)	−6.470 (4.260)
Surge Indicator	0.905 (1.047)	2.463** (1.128)	1.789 (1.208)
Bus Count	3.278*** (0.187)	3.303*** (0.179)	3.345*** (0.182)
Ave. Stop Count	0.782*** (0.096)	0.791*** (0.092)	0.790*** (0.093)
Temperature	0.930* (0.474)	0.723 (0.442)	0.820* (0.448)
Rain	−0.493 (1.014)	−0.388 (0.978)	−0.232 (0.980)
Snow	1.131 (1.248)	0.747 (1.163)	0.873 (1.150)
North I-376 (Inbound)	0.033 (0.021)	0.036* (0.020)	0.032 (0.020)
South I-376 (Outbound)	−0.025 (0.037)	−0.014 (0.035)	−0.012 (0.036)
South I-279 (Inbound)	0.018 (0.040)	0.026 (0.038)	0.023 (0.038)
North I-279 (Outbound)	0.055 (0.045)	0.046 (0.043)	0.050 (0.044)
West I-376 (Inbound)	−0.050 (0.043)	−0.066 (0.042)	−0.065 (0.042)
East I-376 (Outbound)	0.057** (0.025)	0.052** (0.024)	0.047* (0.025)
Observations	765	807	812
R ²	0.440	0.440	0.434
Adjusted R ²	0.404	0.405	0.399

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 35: Regression results for South Side

	North Side (Weekend 5pm-10pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−3.091 (2.771)	−2.796 (2.703)	−1.948 (2.677)
Surge Indicator	−0.237 (0.578)	−0.354 (0.617)	−0.489 (0.708)
Bus Count	1.352*** (0.094)	1.311*** (0.091)	1.336*** (0.089)
Ave. Stop Count	0.284*** (0.067)	0.287*** (0.066)	0.286*** (0.065)
Temperature	0.708** (0.290)	0.692** (0.276)	0.655** (0.274)
Rain	0.304 (0.711)	0.184 (0.680)	0.281 (0.681)
Snow	−0.084 (0.690)	−0.202 (0.647)	−0.230 (0.641)
North I-376 (Inbound)	−0.015 (0.013)	−0.009 (0.012)	−0.010 (0.012)
South I-376 (Outbound)	0.010 (0.026)	0.005 (0.025)	−0.0005 (0.024)
South I-279 (Inbound)	0.022 (0.025)	0.019 (0.025)	0.016 (0.024)
North I-279 (Outbound)	−0.018 (0.027)	−0.017 (0.027)	−0.021 (0.026)
West I-376 (Inbound)	0.041 (0.026)	0.038 (0.025)	0.036 (0.025)
East I-376 (Outbound)	−0.006 (0.016)	−0.004 (0.016)	−0.003 (0.016)
Observations	846	876	883
R ²	0.392	0.377	0.381
Adjusted R ²	0.357	0.341	0.346
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 36: Regression results for North Side

	Strip District (Weekend 5pm-10pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−2.429* (1.396)	−1.621 (1.326)	−1.872 (1.322)
Surge Indicator	0.272 (0.283)	0.105 (0.272)	0.238 (0.322)
Bus Count	0.157*** (0.053)	0.132*** (0.050)	0.143*** (0.050)
Ave. Stop Count	0.155** (0.072)	0.143** (0.068)	0.146** (0.068)
Temperature	0.257** (0.129)	0.257** (0.121)	0.270** (0.122)
Rain	−0.069 (0.316)	−0.095 (0.299)	−0.136 (0.305)
Snow	−0.035 (0.462)	−0.069 (0.402)	−0.058 (0.400)
North I-376 (Inbound)	0.001 (0.006)	0.0005 (0.005)	0.001 (0.005)
South I-376 (Outbound)	0.003 (0.011)	0.002 (0.011)	0.001 (0.011)
South I-279 (Inbound)	0.012 (0.012)	0.010 (0.011)	0.011 (0.011)
North I-279 (Outbound)	0.020 (0.014)	0.013 (0.013)	0.013 (0.013)
West I-376 (Inbound)	0.003 (0.012)	0.003 (0.011)	0.007 (0.011)
East I-376 (Outbound)	−0.004 (0.007)	−0.004 (0.007)	−0.003 (0.007)
DT_Liberty_East	−0.017 (0.015)	−0.020 (0.014)	−0.019 (0.014)
DT_PENN_East	0.022 (0.018)	0.016 (0.017)	0.017 (0.017)
DT_Liberty_West	0.011 (0.011)	0.012 (0.011)	0.013 (0.011)
Observations	636	657	660
R ²	0.143	0.138	0.141
Adjusted R ²	0.069	0.067	0.071

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 37: Regression results for Strip District

	Shadyside (Weekend 5pm-10pm)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	1.976 (4.634)	2.535 (4.423)	3.282 (4.475)
Surge Indicator	-1.326* (0.735)	-0.605 (0.749)	0.031 (0.736)
Bus Count	1.882*** (0.199)	1.754*** (0.187)	1.716*** (0.186)
Ave. Stop Count	0.668*** (0.122)	0.773*** (0.116)	0.750*** (0.115)
Temperature	0.818 (0.508)	0.454 (0.461)	0.225 (0.460)
Rain	0.204 (1.083)	0.165 (1.019)	-0.115 (1.031)
Snow	0.630 (1.142)	0.555 (1.126)	0.377 (1.149)
North I-376 (Inbound)	-0.032 (0.021)	-0.027 (0.020)	-0.019 (0.020)
South I-376 (Outbound)	0.003 (0.033)	-0.008 (0.031)	-0.007 (0.032)
South I-279 (Inbound)	0.013 (0.041)	0.001 (0.040)	-0.011 (0.040)
North I-279 (Outbound)	-0.072 (0.048)	-0.066 (0.045)	-0.058 (0.045)
West I-376 (Inbound)	-0.010 (0.043)	-0.010 (0.043)	-0.016 (0.042)
East I-376 (Outbound)	0.010 (0.027)	0.014 (0.026)	0.014 (0.026)
ES_Eastbound	0.035 (0.056)	0.011 (0.053)	-0.008 (0.054)
ES_Westbound	0.069 (0.070)	0.105 (0.065)	0.105 (0.067)
Observations	413	449	466
R ²	0.394	0.384	0.365
Adjusted R ²	0.312	0.309	0.291
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 38: Regression results for Shadyside

	East Liberty (Weekend 5pm-10pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	6.341 (8.643)	3.629 (8.287)	0.716 (8.022)
Surge Indicator	1.286 (1.392)	0.530 (1.313)	−1.668 (1.298)
Bus Count	2.650*** (0.214)	2.624*** (0.203)	2.574*** (0.195)
Ave. Stop Count	0.053 (0.311)	0.051 (0.290)	−0.161 (0.286)
Temperature	2.153** (0.915)	1.718** (0.853)	2.251*** (0.811)
Rain	2.015 (1.943)	1.194 (1.842)	2.075 (1.791)
Snow	1.028 (2.015)	1.790 (2.056)	2.943 (1.938)
North I-376 (Inbound)	0.013 (0.040)	−0.009 (0.037)	0.005 (0.035)
South I-376 (Outbound)	−0.090 (0.064)	−0.058 (0.061)	−0.073 (0.059)
South I-279 (Inbound)	−0.006 (0.075)	0.008 (0.072)	0.006 (0.069)
North I-279 (Outbound)	−0.096 (0.088)	−0.059 (0.084)	−0.021 (0.080)
West I-376 (Inbound)	0.053 (0.079)	0.073 (0.076)	0.063 (0.073)
East I-376 (Outbound)	0.064 (0.052)	0.046 (0.049)	0.056 (0.048)
ES_Eastbound	0.101 (0.101)	0.096 (0.095)	0.093 (0.090)
ES_Westbound	−0.017 (0.130)	−0.126 (0.122)	0.009 (0.117)
Observations	474	522	540
R ²	0.524	0.508	0.515
Adjusted R ²	0.469	0.457	0.467

Note: *p<0.1; **p<0.05; ***p<0.01

Table 39: Regression results for East Liberty

2 Robust Checks

2.1 Buffer Radius

	Wilkinsburg (Weekday 4pm-7pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−0.483 (1.714)	−0.035 (1.668)	−0.213 (1.704)
Surge Indicator	−0.814 (0.637)	−1.202 (0.758)	0.818 (1.489)
Bus Count	0.477*** (0.038)	0.474*** (0.037)	0.478*** (0.037)
Ave. Stop Count	0.452*** (0.154)	0.437*** (0.153)	0.437*** (0.152)
Temperature	0.198 (0.230)	0.222 (0.226)	0.207 (0.226)
Rain	0.097 (0.325)	0.033 (0.321)	0.055 (0.321)
Snow	−0.394 (0.398)	−0.367 (0.381)	−0.357 (0.384)
North I-376 (Inbound)	0.005 (0.009)	0.006 (0.009)	0.005 (0.009)
South I-376 (Outbound)	−0.009 (0.010)	−0.011 (0.010)	−0.011 (0.010)
South I-279 (Inbound)	0.009 (0.023)	0.004 (0.022)	0.002 (0.022)
North I-279 (Outbound)	0.005 (0.015)	0.005 (0.015)	0.006 (0.015)
West I-376 (Inbound)	−0.019 (0.013)	−0.019 (0.013)	−0.018 (0.013)
East I-376 (Outbound)	−0.007 (0.017)	−0.009 (0.017)	−0.006 (0.017)
ES_Eastbound	0.105*** (0.039)	0.111*** (0.038)	0.116*** (0.039)
ES_Westbound	0.025 (0.043)	0.024 (0.042)	0.022 (0.042)
Observations	1,337	1,364	1,365
R ²	0.213	0.218	0.219
Adjusted R ²	0.189	0.194	0.195

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 40: Regression results for Wilkinsburg - 1,000-ft Buffer

Wilkinsburg (Weekday 4pm-7pm)			
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	3.513 (4.838)	5.635 (4.775)	5.411 (4.875)
Surge Indicator	-4.761*** (1.776)	-6.673*** (2.138)	-5.758 (3.757)
Bus Count	1.441*** (0.078)	1.409*** (0.077)	1.420*** (0.077)
Ave. Stop Count	0.732** (0.321)	0.702** (0.318)	0.700** (0.318)
Temperature	0.585 (0.643)	0.750 (0.636)	0.700 (0.637)
Rain	0.784 (0.908)	0.477 (0.904)	0.587 (0.906)
Snow	-0.157 (1.106)	0.128 (1.070)	0.168 (1.078)
North I-376 (Inbound)	-0.010 (0.025)	-0.005 (0.025)	-0.006 (0.025)
South I-376 (Outbound)	0.015 (0.027)	0.009 (0.027)	0.012 (0.027)
South I-279 (Inbound)	-0.077 (0.064)	-0.106* (0.063)	-0.109* (0.063)
North I-279 (Outbound)	0.018 (0.041)	0.012 (0.041)	0.011 (0.041)
West I-376 (Inbound)	-0.035 (0.037)	-0.038 (0.036)	-0.034 (0.036)
East I-376 (Outbound)	0.028 (0.048)	0.031 (0.047)	0.037 (0.047)
ES_Eastbound	0.038 (0.107)	0.046 (0.106)	0.029 (0.107)
ES_Westbound	0.169 (0.120)	0.187 (0.119)	0.184 (0.119)
Observations	1,343	1,370	1,372
R ²	0.416	0.414	0.414
Adjusted R ²	0.398	0.396	0.396
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 41: Regression results for Wilkinsburg - 2,000-ft Buffer

U. of Pittsburgh (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−23.533*** (8.327)	−25.364*** (8.122)	−26.033*** (8.086)
Surge Indicator	3.478* (1.892)	4.529** (2.197)	7.260*** (2.447)
Bus Count	3.595*** (0.121)	3.574*** (0.120)	3.572*** (0.119)
Ave. Stop Count	9.698*** (0.824)	9.624*** (0.814)	9.737*** (0.812)
Temperature	−0.919 (0.765)	−0.970 (0.748)	−0.912 (0.744)
Rain	1.199 (1.252)	1.301 (1.231)	1.315 (1.225)
Snow	1.929 (1.724)	3.023* (1.677)	3.190* (1.674)
North I-376 (Inbound)	0.018 (0.048)	0.038 (0.047)	0.047 (0.047)
South I-376 (Outbound)	0.068 (0.065)	0.063 (0.064)	0.054 (0.063)
South I-279 (Inbound)	0.133** (0.055)	0.123** (0.054)	0.130** (0.054)
North I-279 (Outbound)	0.017 (0.065)	0.018 (0.063)	0.019 (0.063)
West I-376 (Inbound)	−0.029 (0.076)	−0.034 (0.074)	−0.017 (0.074)
East I-376 (Outbound)	0.009 (0.074)	0.025 (0.073)	0.011 (0.073)
Observations	1,566	1,624	1,637
R ²	0.682	0.677	0.678
Adjusted R ²	0.671	0.667	0.668

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 42: Regression results for University of Pittsburgh - 1,000-ft Buffer

U. of Pittsburgh (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-54.258*** (15.986)	-58.321*** (15.454)	-59.183*** (15.448)
Surge Indicator	6.960* (3.631)	6.263 (4.177)	13.099*** (4.673)
Bus Count	6.270*** (0.211)	6.206*** (0.207)	6.170*** (0.204)
Ave. Stop Count	10.565*** (0.700)	10.439*** (0.681)	10.635*** (0.685)
Temperature	-3.819*** (1.468)	-4.329*** (1.422)	-4.233*** (1.421)
Rain	0.150 (2.401)	0.202 (2.341)	0.088 (2.340)
Snow	8.335** (3.308)	8.706*** (3.189)	8.061** (3.196)
North I-376 (Inbound)	0.007 (0.092)	0.040 (0.089)	0.052 (0.089)
South I-376 (Outbound)	0.150 (0.125)	0.123 (0.121)	0.097 (0.121)
South I-279 (Inbound)	0.220** (0.106)	0.242** (0.103)	0.267*** (0.102)
North I-279 (Outbound)	0.025 (0.124)	0.029 (0.120)	0.035 (0.120)
West I-376 (Inbound)	-0.128 (0.145)	-0.116 (0.141)	-0.085 (0.142)
East I-376 (Outbound)	0.018 (0.141)	0.035 (0.138)	-0.005 (0.139)
Observations	1,567	1,625	1,638
R ²	0.680	0.681	0.679
Adjusted R ²	0.670	0.671	0.669

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 43: Regression results for University of Pittsburgh - 2,000-ft Buffer

	East Liberty (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−1.921 (3.187)	−1.719 (3.088)	−1.408 (3.083)
Surge Indicator	−1.447 (1.034)	−0.638 (0.922)	−1.256 (1.100)
Bus Count	1.265*** (0.071)	1.248*** (0.070)	1.244*** (0.070)
Ave. Stop Count	0.538*** (0.168)	0.506*** (0.164)	0.504*** (0.163)
Temperature	−0.061 (0.272)	−0.052 (0.263)	−0.043 (0.261)
Rain	−0.409 (0.425)	−0.374 (0.417)	−0.314 (0.410)
Snow	−0.609 (0.561)	−0.605 (0.531)	−0.670 (0.535)
North I-376 (Inbound)	−0.032* (0.018)	−0.032* (0.017)	−0.033* (0.017)
South I-376 (Outbound)	0.025 (0.026)	0.030 (0.026)	0.031 (0.025)
South I-279 (Inbound)	−0.001 (0.023)	−0.002 (0.022)	−0.005 (0.022)
North I-279 (Outbound)	−0.018 (0.026)	−0.015 (0.025)	−0.014 (0.025)
West I-376 (Inbound)	0.020 (0.030)	0.014 (0.030)	0.013 (0.029)
East I-376 (Outbound)	0.030 (0.028)	0.028 (0.027)	0.027 (0.027)
ES_Eastbound	0.024 (0.032)	0.021 (0.032)	0.021 (0.031)
ES_Westbound	−0.053 (0.044)	−0.059 (0.043)	−0.063 (0.043)
Observations	1,075	1,110	1,118
R ²	0.377	0.376	0.377
Adjusted R ²	0.345	0.345	0.347
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 44: Regression results for East Liberty - 1,000-ft Buffer

	East Liberty (Weekday 7pm-12am)		
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	−0.483 (6.571)	−2.518 (6.309)	−2.150 (6.289)
Surge Indicator	−2.543 (2.197)	−3.097 (1.962)	−4.551* (2.336)
Bus Count	2.046*** (0.097)	2.014*** (0.095)	2.015*** (0.094)
Ave. Stop Count	0.933*** (0.211)	0.912*** (0.207)	0.906*** (0.205)
Temperature	0.275 (0.565)	0.416 (0.546)	0.423 (0.542)
Rain	−1.242 (0.884)	−1.238 (0.868)	−1.152 (0.854)
Snow	−2.360** (1.170)	−2.418** (1.105)	−2.313** (1.112)
North I-376 (Inbound)	−0.036 (0.038)	−0.031 (0.036)	−0.029 (0.036)
South I-376 (Outbound)	0.091 (0.055)	0.099* (0.054)	0.100* (0.053)
South I-279 (Inbound)	−0.044 (0.047)	−0.042 (0.046)	−0.041 (0.046)
North I-279 (Outbound)	−0.004 (0.053)	0.025 (0.052)	0.018 (0.052)
West I-376 (Inbound)	0.027 (0.063)	0.013 (0.062)	0.018 (0.061)
East I-376 (Outbound)	−0.040 (0.058)	−0.038 (0.056)	−0.044 (0.056)
Observations	1,122	1,160	1,169
R ²	0.516	0.516	0.520
Adjusted R ²	0.492	0.493	0.497

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 45: Regression results for East Liberty - 2,000-ft Buffer

Carnegie Mellon (Weekend 5pm-10pm)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-16.889** (7.427)	-11.656* (6.976)	-12.362* (7.005)
Surge Indicator	3.265** (1.453)	3.568** (1.609)	4.005** (1.660)
Bus Count	3.864*** (0.245)	3.850*** (0.236)	3.907*** (0.234)
Ave. Stop Count	5.105*** (0.556)	5.056*** (0.526)	5.177*** (0.530)
Temperature	0.184 (0.825)	0.249 (0.784)	0.169 (0.788)
Rain	2.604 (1.584)	2.335 (1.523)	2.531 (1.539)
Snow	0.416 (1.746)	0.766 (1.702)	1.486 (1.682)
North I-376 (Inbound)	0.053 (0.038)	0.074** (0.036)	0.081** (0.036)
South I-376 (Outbound)	0.068 (0.056)	0.072 (0.054)	0.050 (0.055)
South I-279 (Inbound)	0.022 (0.065)	-0.001 (0.061)	-0.006 (0.061)
North I-279 (Outbound)	0.043 (0.073)	-0.015 (0.070)	-0.009 (0.070)
West I-376 (Inbound)	-0.104* (0.062)	-0.114* (0.060)	-0.110* (0.061)
East I-376 (Outbound)	0.018 (0.046)	0.019 (0.043)	0.036 (0.043)
Observations	604	631	656
R ²	0.528	0.519	0.512
Adjusted R ²	0.489	0.480	0.475

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 46: Regression results for Carnegie Mellon - 1,000-ft Buffer

Carnegie Mellon (Weekend 5pm-10pm)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-25.264*** (9.213)	-21.871** (8.602)	-23.137*** (8.617)
Surge Indicator	3.588** (1.806)	4.201** (2.018)	4.403** (2.077)
Bus Count	4.079*** (0.235)	4.148*** (0.226)	4.140*** (0.222)
Ave. Stop Count	4.372*** (0.428)	4.247*** (0.399)	4.417*** (0.401)
Temperature	0.340 (1.022)	0.282 (0.964)	0.391 (0.966)
Rain	3.470* (1.998)	2.937 (1.896)	2.966 (1.911)
Snow	-0.131 (2.151)	0.585 (2.051)	0.878 (2.023)
North I-376 (Inbound)	0.068 (0.047)	0.101** (0.045)	0.101** (0.044)
South I-376 (Outbound)	0.097 (0.071)	0.098 (0.067)	0.081 (0.068)
South I-279 (Inbound)	-0.012 (0.080)	-0.030 (0.075)	-0.031 (0.075)
North I-279 (Outbound)	0.097 (0.090)	0.037 (0.085)	0.042 (0.085)
West I-376 (Inbound)	-0.080 (0.078)	-0.085 (0.075)	-0.079 (0.076)
East I-376 (Outbound)	0.0002 (0.056)	0.004 (0.053)	0.021 (0.052)
Observations	634	665	690
R ²	0.549	0.547	0.539
Adjusted R ²	0.512	0.513	0.505

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 47: Regression results for Carnegie Mellon - 2,000-ft Buffer

2.2 Lagged Treatment Variable

	Wilkinsburg (Weekday 4pm-7pm)		
	Bus Boardings		
	Surge = 1.2 (1)	Surge = 1.4 (2)	Surge = 1.6 (3)
Intercept	6.846 (4.871)	7.475 (4.794)	6.705 (4.826)
Surge Indicator	−0.988 (2.036)	0.305 (2.774)	−0.667 (8.221)
Bus Count	1.421*** (0.079)	1.389*** (0.077)	1.396*** (0.077)
Ave. Stop Count	0.179 (0.369)	0.229 (0.364)	0.184 (0.362)
Temperature	0.632 (0.641)	0.555 (0.630)	0.514 (0.627)
Rain	0.568 (0.902)	0.420 (0.889)	0.530 (0.889)
Snow	0.201 (1.104)	0.039 (1.054)	0.116 (1.063)
North I-376 (Inbound)	−0.004 (0.025)	0.001 (0.024)	0.002 (0.024)
South I-376 (Outbound)	0.020 (0.027)	0.017 (0.027)	0.018 (0.027)
South I-279 (Inbound)	−0.096 (0.063)	−0.096 (0.062)	−0.090 (0.062)
North I-279 (Outbound)	0.018 (0.041)	0.014 (0.041)	0.013 (0.041)
West I-376 (Inbound)	−0.046 (0.037)	−0.045 (0.036)	−0.044 (0.036)
East I-376 (Outbound)	0.007 (0.047)	0.008 (0.047)	0.014 (0.047)
ES_Eastbound	0.105 (0.107)	0.079 (0.106)	0.085 (0.106)
ES_Westbound	0.074 (0.120)	0.085 (0.118)	0.096 (0.118)
Observations	1,334	1,363	1,369
R ²	0.396	0.396	0.396
Adjusted R ²	0.377	0.378	0.378

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 48: Lagged treatment regression results for Wilkinsburg

U. of Pittsburgh (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-48.186*** (11.655)	-45.639*** (11.445)	-44.538*** (11.362)
Surge Indicator	2.849 (2.964)	2.507 (3.854)	3.221 (5.269)
Bus Count	4.886*** (0.163)	4.850*** (0.159)	4.833*** (0.158)
Ave. Stop Count	9.461*** (0.665)	9.598*** (0.658)	9.585*** (0.655)
Temperature	-2.427** (1.070)	-2.460** (1.042)	-2.311** (1.037)
Rain	0.349 (1.784)	0.495 (1.755)	0.449 (1.743)
Snow	5.011** (2.450)	5.063** (2.398)	5.101** (2.354)
North I-376 (Inbound)	0.094 (0.067)	0.096 (0.066)	0.091 (0.066)
South I-376 (Outbound)	0.095 (0.091)	0.090 (0.089)	0.086 (0.088)
South I-279 (Inbound)	0.183** (0.079)	0.177** (0.077)	0.167** (0.076)
North I-279 (Outbound)	0.062 (0.090)	0.037 (0.088)	0.025 (0.087)
West I-376 (Inbound)	0.063 (0.105)	0.040 (0.104)	0.050 (0.103)
East I-376 (Outbound)	0.066 (0.104)	0.076 (0.101)	0.080 (0.101)
Observations	1,549	1,601	1,614
R ²	0.692	0.690	0.690
Adjusted R ²	0.682	0.680	0.680

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 49: Lagged treatment regression results for University of Pittsburgh

	East Liberty (Weekday 7pm-12am)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	3.730 (5.053)	2.432 (4.994)	0.451 (4.843)
Surge Indicator	−0.957 (2.405)	−0.610 (2.958)	0.359 (3.410)
Bus Count	1.858*** (0.092)	1.870*** (0.091)	1.874*** (0.090)
Ave. Stop Count	0.102 (0.190)	0.111 (0.187)	0.091 (0.184)
Temperature	0.534 (0.459)	0.460 (0.450)	0.489 (0.445)
Rain	−0.931 (0.740)	−1.094 (0.729)	−1.045 (0.711)
Snow	−1.782* (0.956)	−1.361 (0.937)	−1.387 (0.927)
North I-376 (Inbound)	−0.016 (0.031)	−0.009 (0.030)	−0.005 (0.030)
South I-376 (Outbound)	0.040 (0.045)	0.037 (0.045)	0.048 (0.044)
South I-279 (Inbound)	−0.064* (0.039)	−0.054 (0.038)	−0.040 (0.037)
North I-279 (Outbound)	0.004 (0.043)	0.015 (0.042)	0.016 (0.042)
West I-376 (Inbound)	−0.014 (0.051)	−0.010 (0.050)	−0.007 (0.049)
East I-376 (Outbound)	0.012 (0.048)	0.004 (0.047)	0.005 (0.046)
ES_Eastbound	0.021 (0.055)	0.017 (0.054)	0.012 (0.053)
ES_Westbound	−0.109 (0.075)	−0.104 (0.074)	−0.092 (0.073)
Observations	1,109	1,137	1,156
R ²	0.473	0.471	0.473
Adjusted R ²	0.447	0.445	0.449

Note: *p<0.1; **p<0.05; ***p<0.01

Table 50: Lagged treatment regression results for East Liberty

	Carnegie Mellon (Weekend 5pm-10pm)		
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	(3)
Intercept	-18.769** (8.665)	-17.016** (8.129)	-15.352* (8.035)
Surge Indicator	-0.847 (2.124)	-0.629 (3.133)	0.605 (3.150)
Bus Count	4.438*** (0.267)	4.430*** (0.260)	4.377*** (0.257)
Ave. Stop Count	4.280*** (0.434)	4.268*** (0.412)	4.489*** (0.410)
Temperature	0.671 (0.965)	0.671 (0.914)	0.626 (0.910)
Rain	2.894 (1.828)	3.104* (1.739)	2.958* (1.745)
Snow	1.034 (1.954)	1.001 (1.840)	0.753 (1.855)
North I-376 (Inbound)	0.074* (0.044)	0.089** (0.041)	0.083** (0.040)
South I-376 (Outbound)	0.107* (0.064)	0.078 (0.061)	0.065 (0.062)
South I-279 (Inbound)	0.055 (0.074)	0.025 (0.071)	-0.001 (0.070)
North I-279 (Outbound)	-0.033 (0.083)	-0.033 (0.080)	-0.023 (0.080)
West I-376 (Inbound)	-0.119 (0.073)	-0.140** (0.070)	-0.139** (0.070)
East I-376 (Outbound)	0.027 (0.052)	0.072 (0.048)	0.066 (0.048)
Observations	598	635	657
R ²	0.536	0.533	0.528
Adjusted R ²	0.496	0.496	0.492

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 51: Lagged treatment regression results for Carnegie Mellon

2.3 Propensity Score Weighted Linear Regression

The variables selected for propensity weight calculations were the bus count, average stops, temperature, rain, snow, local traffic conditions, and day of week, month, and time of day fixed effects.

	Wilkinsburg (Weekday 4pm-7pm)	
	Bus Boardings	
	Surge = 1.2	Surge = 1.4
	(1)	(2)
Intercept	6.089 (9.947)	20.127** (8.669)
Surge Indicator	-2.987*** (1.014)	-6.143*** (0.937)
Bus Count	0.917*** (0.176)	1.099*** (0.172)
Ave. Stop Count	2.494** (1.017)	1.305 (1.133)
Temperature	0.133 (1.223)	-0.802 (1.363)
Rain	2.767 (2.123)	-0.846 (2.443)
Snow	-2.765 (1.941)	-3.910** (1.933)
North I-376 (Inbound)	0.017 (0.044)	0.003 (0.055)
South I-376 (Outbound)	0.135*** (0.052)	0.059 (0.060)
South I-279 (Inbound)	-0.162 (0.154)	-0.236 (0.150)
North I-279 (Outbound)	0.087 (0.083)	0.040 (0.082)
West I-376 (Inbound)	-0.033 (0.090)	-0.118 (0.086)
East I-376 (Outbound)	0.080 (0.136)	-0.013 (0.112)
ES_Eastbound	-0.157 (0.195)	0.249 (0.217)
ES_Westbound	-0.055 (0.215)	0.298 (0.327)
Observations	1,343	1,370
Log Likelihood	-9,573.164	-13,657.930
Akaike Inf. Crit.	19,228.330	27,397.870

Note: *p<0.1; **p<0.05; ***p<0.01

Table 52: Regression results for Wilkinsburg

University of Pittsburgh (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	
Intercept	43.607** (20.806)	6.178 (24.689)	-13.799 (33.090)
Surge Indicator	2.103 (1.705)	-4.361* (2.340)	9.675*** (3.322)
Bus Count	5.357*** (0.411)	5.023*** (0.718)	7.735*** (0.915)
Ave. Stop Count	6.132*** (1.111)	7.859*** (1.653)	2.923 (2.371)
Temperature	-11.576*** (3.128)	-12.895*** (4.734)	4.990 (5.923)
Rain	-11.936*** (3.065)	-4.228 (4.108)	-2.080 (7.325)
Snow	-15.175*** (3.479)	1.238 (3.836)	-15.732** (6.745)
North I-376 (Inbound)	-0.381*** (0.127)	-0.065 (0.193)	0.012 (0.225)
South I-376 (Outbound)	0.278 (0.176)	0.219 (0.376)	-0.354 (0.434)
South I-279 (Inbound)	0.026 (0.143)	0.008 (0.151)	0.156 (0.328)
North I-279 (Outbound)	-0.469** (0.197)	0.256 (0.275)	-0.462 (0.520)
West I-376 (Inbound)	-0.197 (0.243)	0.050 (0.407)	1.089** (0.432)
East I-376 (Outbound)	-0.246 (0.178)	-1.006*** (0.246)	-0.243 (0.374)
Observations	1,117	1,155	1,164
Log Likelihood	-11,230.880	-15,113.770	-18,094.840
Akaike Inf. Crit.	22,563.750	30,329.540	36,291.680

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 53: Regression results for University of Pittsburgh

East Liberty (Weekday 7pm-12am)			
	Surge = 1.2	Bus Boardings Surge = 1.4	Surge = 1.6
	(1)	(2)	
Intercept	0.542 (18.695)	4.149 (10.239)	22.217 (16.174)
Surge Indicator	−2.349*** (0.768)	−2.369*** (0.650)	−3.109*** (1.148)
Bus Count	1.423*** (0.242)	1.736*** (0.210)	1.909*** (0.501)
Ave. Stop Count	0.215 (0.421)	−0.208 (0.407)	0.911 (0.805)
Temperature	0.011 (1.388)	1.147 (1.168)	1.523 (1.871)
Rain	−2.298* (1.302)	−2.092** (1.039)	−3.723 (3.230)
Snow	−1.235 (1.729)	−3.503*** (1.329)	−3.897 (4.639)
North I-376 (Inbound)	−0.054 (0.091)	−0.036 (0.057)	−0.054 (0.096)
South I-376 (Outbound)	−0.021 (0.090)	0.105 (0.079)	0.160 (0.148)
South I-279 (Inbound)	0.034 (0.092)	0.042 (0.071)	−0.110 (0.135)
North I-279 (Outbound)	0.092 (0.107)	−0.037 (0.077)	0.115 (0.180)
West I-376 (Inbound)	0.018 (0.142)	−0.080 (0.130)	−0.131 (0.266)
East I-376 (Outbound)	0.024 (0.174)	−0.050 (0.114)	−0.047 (0.225)
ES_Eastbound	0.335** (0.134)	0.391*** (0.100)	−0.132 (0.300)
ES_Westbound	0.142 (0.176)	−0.006 (0.174)	−0.414 (0.401)
Observations	1,118	1,156	1,165
Log Likelihood	−11,670.710	−10,063.400	−16,560.130
Akaike Inf. Crit.	23,447.420	20,232.800	33,226.270

Note: *p<0.1; **p<0.05; ***p<0.01

Table 54: Regression results for East Liberty

	Carnegie Mellon (Weekend 5pm-10pm)		
	Bus Boardings		
	Surge = 1.2	Surge = 1.4	Surge = 1.6
	(1)	(2)	
Intercept	−68.806*** (24.914)	21.628 (16.498)	13.337 (19.845)
Surge Indicator	2.528 (1.643)	0.487 (1.950)	3.186* (1.930)
Bus Count	6.864*** (0.706)	5.280*** (0.627)	6.909*** (0.677)
Ave. Stop Count	3.882*** (1.247)	2.032** (0.810)	2.324*** (0.802)
Temperature	−4.463** (2.102)	−2.584 (2.997)	−6.585** (2.627)
Rain	6.679 (4.122)	6.010 (3.787)	1.740 (4.172)
Snow	3.940 (3.530)	−2.165 (3.914)	−1.051 (3.392)
North I-376 (Inbound)	−0.208 (0.140)	−0.009 (0.093)	−0.002 (0.090)
South I-376 (Outbound)	0.063 (0.201)	0.041 (0.148)	−0.142 (0.174)
South I-279 (Inbound)	0.524** (0.206)	−0.418** (0.189)	−0.196 (0.230)
North I-279 (Outbound)	0.593** (0.284)	−0.140 (0.229)	−0.014 (0.237)
West I-376 (Inbound)	−0.162 (0.223)	−0.271 (0.182)	−0.257 (0.156)
East I-376 (Outbound)	−0.331* (0.172)	0.139 (0.145)	−0.095 (0.155)
Observations	485	513	538
Log Likelihood	−3,679.843	−4,468.205	−5,447.866
Akaike Inf. Crit.	7,455.687	9,032.410	10,991.730

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 55: Regression results for Carnegie Mellon