Supplemental Information: Weather impact on racial composition and citation activity of traffic stops in the United States

March 28, 2024

The following document presents supplemental information for the paper *Weather impact on racial composition and citation activity of traffic stops in the United States*. All data and code to recreate the analysis in the paper is available at `https://www.github.com/trafficstops/Paper`.

Contents

1 Background and Literature Review

This section provides background information and a literature review associated with the topics covered in the main manuscript.

1.1 Administrative Discretion

Street-level decision-making—such as traffic stops and citations—is marked by the application of administrative discretion (Maynard-Moody and Musheno, 2003). The need for discretion arises from the gap between broad regulations and their practical application in unique situations. Police officers must align their decisions with established laws, procedures, and standards, yet these guidelines do not always align perfectly with the complex realities encountered in frontline operations. Consequently, law enforcement is tasked with interpreting general rules and conflicting values in the process of decision-making (Lipsky, 1980). This process defines administrative discretion as *"the freedom that street-level bureaucrats have in determining the type, quantity, and quality of sanctions [. . .] during policy implementation"* (Tummers and Bekkers, 2014).

Administrative discretion can have both beneficial and detrimental effects on policing. Its primary benefit lies in leveraging officers' experiences, local insights, empathy, and flexibility, which are crucial for nuanced decision-making (Maynard-Moody and Musheno, 2003). However, the same discretion can also lead to adverse outcomes. For instance, in the presence of incomplete information, cognitive constraints, bounded rationality, and racial biases, police activities can create an unequal treatment of motorists (Simon, 1957; Kahneman, 2013; Tummers and Bekkers, 2014).

1.2 Race and Traffic Stops

Measuring the relationship between race and traffic stops is empirically challenging as administrative data only includes information on stopped drivers and not on motorists that committed traffic offences (Grogger and Ridgeway, 2006; Simoiu et al., 2017). This leads to benchmark issues and survey errors. Benchmark issues refer to observing only the racial distribution of stopped drivers and not the distribution of drivers committing traffic offenses (Grogger and Ridgeway, 2006; Simoiu et al., 2017). For example, the Police-Public Contact Survey (PPCS) (Davis et al., 2018) suggests no difference between black and white drivers being stopped compared to their relative population shares. But if driving behavior differs between black and white motorists, then stopping them at the same rate could indicate racial bias. Results based on surveys may suffer from selection bias and recall errors (Pierson et al., 2020). The PPCS likely suffers from recall errors because participants are asked to remember their interactions with police over an entire year.

Two research designs emerged to overcome those challenges. First, researchers started to compare the racial distribution of speeding tickets from automated cameras with traffic stops by police officers (Lange et al., 2005; Lundman and Kowalski, 2009). Those studies found that age, gender, and race play an important role in speeding and that further research is necessary *"to determine whether traffic stops for Driving While Black are in a small part the result of Speeding While Black"* (Lundman and Kowalski, 2009). The large amount of time, effort, and financial resources necessary to conduct these studies make it unlikely that they will be replicated at a large scale.

As an alternative, a second, more cost-effective empirical strategy known as the "veil of darkness" (VOD) was proposed by Grogger and Ridgeway (2006). This strategy assumes that officers are less able to identify a driver's race at night and consequently, in the presence of racial bias, black drivers are less likely being stopped at night. Potential caveats of this strategy are uncontrolled differences in street lighting (Horrace and Rohlin, 2016), race-specific infractions that are more likely at night (Chohlas-Wood et al., 2018), or driving behavior according to visibility (Kalinowski et al., 2021). For instance, broken taillights are more likely to be detected during night time and could be an infraction that is more common among black drivers. As a result, studies using the VOD often provide little or no evidence of racial bias in police stops (Stacey and Bonner, 2021). An exception are Pierson et al. (2020) who find discrimination in traffic stops by employing a nationwide data set in addition to controlling for seasonality and non-race specific driving behavior. While the VOD literature relies on differences in visibility between day and night to evaluate racial bias in traffic stops, we introduce adverse weather as a new angle to quantify shifts in the racial distribution of drivers being stopped and cited.

Next to the already discussed literature using speed camera data or the veil of darkness, there is a large number of additional studies investigating the relationship between race and traffic stops, often coming to different conclusions. Some researchers find little or no evidence of racial disparities in traffic stops and citations. For instance, employing data for Cincinnati (Ohio), Ridgeway (2009) finds fewer citations being issued to black relative to white motorists and hypothesizes that this outcome is explained by black drivers being arrested as opposed to getting cited. The same author matches black drivers to motorists from other races based on infraction, time of day, and region in the City of Oakland, concluding that black drivers are treated equitably in terms of citation rates (Ridgeway, 2006). Using a driver survey conducted in North Carolina, Warren et al. (2006) suggest that racial bias is weak for highway patrol but strong for local police departments. The authors explain their results by differences in work patterns between state and local police and the higher speed of drivers on highways, relative to municipal roads, not allowing for racial profiling (Smith et al., 2001). Using nationwide data, Shane et al. (2017) argue that police killings of civilians are not motivated by race.

These studies are opposed by findings suggesting racial bias. Smith and Petrocelli (2001) find that black motorists are more likely to be stopped relative to their population share in Richmond, Virginia. Making use of data for North Carolina, Baumgartner et al. (2018) suggest racial bias after controlling for legally relevant factors for traffic stops, behavior of single police officers, and the outcomes for contraband searches. Based on administrative data from the Oakland police department, Hetey et al. (2016) demonstrate that officers stopped, searched, handcuffed, and arrested more blacks than whites. This result remained statistically significant after controlling for a large number of factors shaping police actions (e.g. crime rates, police officer characteristics).

An additional stream of research analyzes factors influencing the racial distribution of traffic stops and actions during them. Rojek et al. (2012) demonstrate that black (white) drivers are more likely to be searched in a predominantly white (black) neighborhood by white police officers. Analyzing audio recordings of traffic stops in Oakland (California), Hetey et al. (2016) find that *"more severe legal language"* is used by police officers during stops of black residents. Several researchers also find a relationship between officers' race and gender in the use of force during encounters with the police (Ba et al., 2021; Hoekstra and Sloan, 2022). Stopping location and race of police officers play a role in assessing traffic stops as well, as shown by Roh and Robinson (2009) and Rojek et al. (2012).

1.3 Crime and Weather

There is also a large amount of research related to the relationship between crime and weather with routine activities and heat-aggression theory as the two main strands (Sommer et al., 2018). Routine activities theory postulates that warm and dry weather leads to more outdoor activities and hence, higher probability of victim-offender interaction. We control for a potential shift in the amount of drivers on the road and the related greater likelihood of infractions, during warm and dry weather, by analyzing the racial distribution of drivers during stops and not the number of traffic stops. Heat-aggression theory postulates that high temperatures increases bad temper and annoyance, leading to more aggressive behavior. This behavior is, however, less likely for motorists, as most cars have air conditioning to reduce the temperature in cars.[1]

To analyze more rigorously if weather differently impacts crimes committed by race, we conducted a literature review spanning publications from 1970 to the most recent years (Anderson et al., 1995; Bell and Baron, 1976; Bushman et al., 2005; Cohen and Felson, 1979; Cohn, 1990, 1993; Cohn and Rotton, 1997, 2005; DeFronzo, 1984; Harries et al., 1984; Jacob et al., 2007; Mares, 2013; Rotton and Cohn, 2001; Sommer et al., 2018). Since the 1970s, researchers have consistently shown that weather influences crime rates, but none of these studies claim or find that rain or cold/heat have an effect on crime that differs by race. To our knowledge, there are also no studies demonstrating that adverse weather conditions influence traffic infractions differently between non-white and white drivers.

[1] Already in the early 1960s about 80% of cars in the Southwest were equipped with air conditioning (Phelan and Sorge, 1990). Over the last two decades almost all cars sold had standard air conditioning according to Automotive Air Conditioning History published in *Motortrend* on 24 June 2010.

2 Summary Statistics on Race and Citations

Tables 1 and 2 summarize the distribution of black, Hispanic, and white drivers by city and state police, respectively. Note that for some cities and states, data is missing regarding the issuance of citations whereas for others, the summary statistics indicate that for 100% of stops a citation was issued. For the analysis with *citation* as the dependent variable, all cities and states with a value of 100% citations were removed.

City	State	Black	Hispanic	White	Citation
Connecticut	CT	14%	12%	74%	
Florida	FL	19%	22%	59%	
Georgia	GA	30%	3%	67%	
Michigan	MI	17%	2%	81%	76%
North Dakota	ND	3%	3%	94%	
New Hampshire	NH	3%	2%	96%	33%
New York	NY	12%	8%	80%	
Ohio	OH	13%	2%	84%	
Tennessee	TN	13%	4%	83%	100%
Texas	TX	11%	37%	53%	35%
Wisconsin	WI	6%	4%	90%	50%

Table 1. Percentage distribution of black, Hispanic, and white drivers during traffic stops by state police.

City	State	Black	Hispanic	White	Citation
Albany	NY	39%	5%	56%	
Arlington	TX	36%	24%	40%	
Aurora	CO	25%	5%	70%	100%
Bakersfield	CA	12%	33%	55%	100%
Burlington	VT	9%	1%	91%	
Camden	NJ	47%	34%	19%	
Charlotte	NC	54%	10%	36%	45%
Cincinnati	OH	59%	0%	41%	
Columbus	OH	46%	3%	51%	58%
Durham	NC	60%	12%	28%	45%
Fayetteville	NC	58%	6%	36%	47%
Garland	TX	19%	39%	42%	100%
Grand Forks	ND	9%	0%	91%	98%
Greensboro	NC	56%	5%	39%	51%
Hartford	CT	39%	28%	33%	64%
Henderson	NV	10%	13%	77%	100%
Little Rock	AR	54%	0%	46%	100%
Los Angeles	CA	27%	47%	26%	
Louisville	KY	32%	4%	64%	74%
Madison	WI	22%	9%	70%	70%
Mesa	AZ	8%	19%	73%	100%
Nashville	TN	39%	5%	56%	
New Orleans	LA	71%	3%	27%	31%
Oakland	CA	65%	22%	13%	38%
Oklahoma City	OK	22%	0%	78%	100%
Owensboro	KY	12%	0%	88%	100%
Philadelphia	PA	69%	10%	21%	
Plano	TX	16%	15%	69%	
Raleigh	NC	49%	9%	41%	46%
Saint Paul	MN	45%	8%	47%	26%
San Antonio	TX	10%	51%	39%	100%
San Diego	CA	13%	36%	51%	
San Francisco	CA	24%	20%	56%	65%
San Jose	CA	11%	67%	22%	
Tulsa	OK	23%	2%	74%	
Wichita	KS	17%	14%	69%	100%
Winston-Salem	NC	48%	11%	42%	64%

Table 2. Percentage distribution of black, Hispanic, and white drivers during traffic stops by city police.

3 Daily and Hourly Pattern of Traffic Stops by Race/Ethnicity

Figure 1 and 2 depict the patterns of traffic stops over a 24-hour period. Given the large variation in patterns, individual estimation by city and state police department using hourly dummy variables is preferred over a fixed effects logit model.

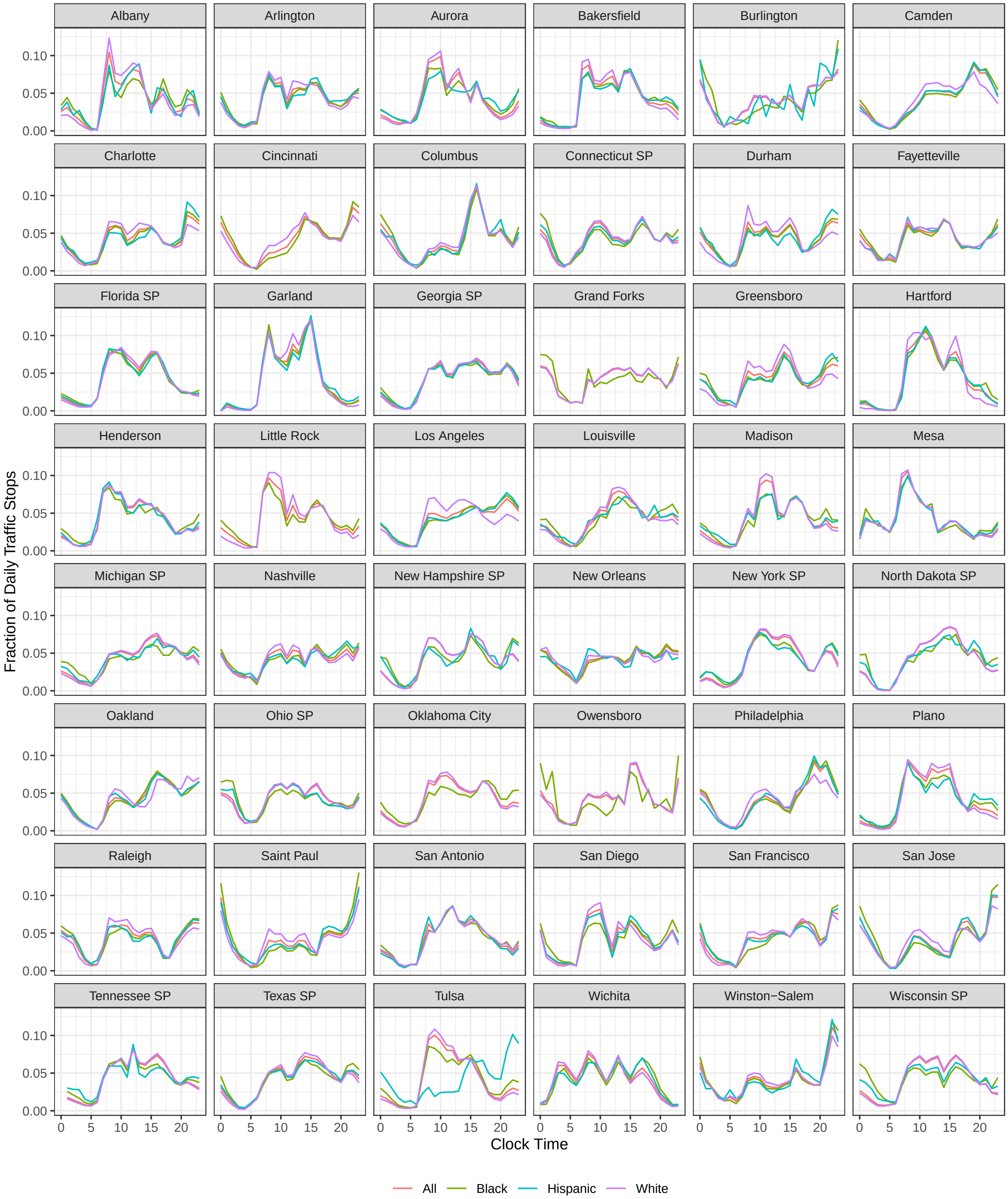

Figure 1. Fraction of Daily Traffic Stops by Time and Race/Ethnicity

Figure 2. Fraction of Hourly Traffic Stops by Time and Race/Ethnicity

4 Temperature and Precipitation Patterns

There are also differences in the intensity of rain and heat/cold across the jurisdictions in our model. Hence, the separation of the models by jurisdiction is warranted. Note that all the results presented for the jurisdiction-specific models are based on relative precipitation and temperature as described in the main manuscript.

		Max. Precipitation		Temperature					
Jurisdiction	State	1-hour	20-min	Min.	Q1	Q2	Mean	Q3	Max.
Connecticut	CT	8.59	2.86	-24.00	2.77	13.49	11.84	20.83	33.32
Florida	FL	21.48	7.16	-9.17	21.88	26.05	24.85	29.01	40.56
Georgia	GA	30.28	10.09	-16.15	12.81	21.02	19.64	27.03	43.45
Michigan	MI	15.03	5.01	-25.87	1.29	11.99	11.18	21.20	41.35
New Hampshire	NH	7.91	2.64	-27.94	0.77	11.09	9.66	19.18	32.96
New York	NY	16.76	5.59	-28.08	1.98	11.69	10.90	20.12	35.95
North Dakota	ND	8.56	2.85	-33.75	-2.88	10.35	8.99	21.35	43.07
Ohio	OH	14.11	4.70	-24.72	4.69	14.85	13.63	22.66	41.23
Tennessee	TN	20.13	6.71	-17.90	8.92	17.61	16.70	24.96	44.53
Texas	TX	20.05	6.68	-17.41	16.56	24.29	23.00	30.08	46.47
Wisconsin	WI	11.50	3.83	-32.48	0.11	11.42	10.67	21.46	43.38

		Max. Precipitation		Temperature					
Jurisdiction	State	1-hour	20-min	Min.	Q1	Q2	Mean	Q3	Max.
Albany	NY	8.02	2.67	-22.86	1.06	10.96	10.23	19.72	33.80
Arlington	TX	7.48	2.49	-7.71	13.10	20.64	20.26	27.60	41.28
Aurora	CO	5.69	1.90	-21.80	7.52	15.63	15.18	23.16	39.12
Bakersfield	CA	1.57	0.52	-2.86	13.09	19.71	20.49	27.78	43.41
Burlington	VT	6.05	2.02	-28.02	-2.60	5.61	6.14	16.52	31.37
Camden	NJ	12.98	4.33	-17.65	4.25	12.94	12.86	21.47	36.60
Charlotte	NC	9.89	3.30	-12.73	9.17	17.91	17.06	25.02	40.37
Cincinnati	OH	12.33	4.11	-19.84	4.29	13.92	13.47	22.60	40.70
Columbus	OH	7.52	2.51	-21.24	3.37	13.81	13.07	22.90	37.81
Durham	NC	11.06	3.69	-12.05	8.09	17.32	16.54	24.86	41.77
Fayetteville	NC	8.26	2.75	-11.66	10.24	18.75	17.79	25.40	41.64
Garland	TX	7.68	2.56	-9.42	15.79	24.15	23.01	30.99	44.46
Grand Forks	ND	11.02	3.67	-31.93	-3.82	10.00	8.13	20.29	42.52
Greensboro	NC	10.26	3.42	-14.10	7.71	16.77	16.14	24.51	39.20
Hartford	CT	3.37	1.12	-19.23	2.11	11.77	11.30	20.76	32.93
Henderson	NV	1.60	0.53	-6.96	12.63	20.43	20.43	28.45	43.44
Little Rock	AR	11.82	3.94	-7.32	16.15	22.88	21.35	27.60	35.98
Los Angeles	CA	3.29	1.10	-1.37	12.87	17.92	18.23	23.24	37.74
Louisville	KY	9.17	3.06	-25.67	6.47	16.37	15.18	24.36	34.77
Madison	WI	11.70	3.90	-28.59	0.75	13.20	11.67	22.57	42.97
Mesa	AZ	2.28	0.76	-0.43	15.41	22.36	22.70	29.99	45.80
Nashville	TN	13.72	4.57	-15.93	7.99	17.28	16.25	24.95	39.22
New Orleans	LA	13.76	4.59	-4.27	17.92	23.50	22.26	27.59	37.77
Oakland	CA	2.82	0.94	-0.48	12.55	16.63	17.54	21.94	42.21
Oklahoma City	OK	15.19	5.06	-14.64	11.65	21.14	20.16	28.86	45.85
Owensboro	KY	4.65	1.55	-11.79	8.38	17.66	16.65	25.39	36.14
Philadelphia	PA	26.76	8.92	-18.23	4.29	12.99	12.77	21.42	35.65
Plano	TX	7.56	2.52	-10.05	14.10	22.94	22.07	30.42	45.20
Raleigh	NC	13.23	4.41	-13.12	8.17	17.38	16.53	24.79	42.58
Saint Paul	MN	14.59	4.86	-33.69	-3.42	7.17	6.93	17.87	41.65
San Antonio	TX	11.73	3.91	-6.11	18.33	25.23	24.16	30.63	42.98
San Diego	CA	2.65	0.88	1.80	13.78	18.64	18.84	23.40	38.40
San Francisco	CA	4.44	1.48	2.74	11.31	12.86	13.03	14.68	25.05
San Jose	CA	2.86	0.95	-2.26	10.81	14.80	15.94	20.15	42.82
Tulsa	OK	9.12	3.04	-18.04	10.61	19.97	19.48	28.24	46.76
Wichita	KS	9.64	3.21	-20.30	7.28	17.45	16.81	26.14	44.78
Winston-Salem	NC	8.85	2.95	-13.03	7.61	15.88	15.41	23.24	38.56

5 Regression Results: Black

5.1 City Police Departments

5.1.1 Albany (New York)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.188**	0.187**	0.182**	0.183**	0.180**	0.182**
	(0.088)	(0.088)	(0.089)	(0.089)	(0.089)	(0.089)
Precip.	0.084	0.077	0.085		3.709	3.908
	(0.087)	(0.099)	(0.087)		(2.899)	(3.052)
Night × *Precip.*		0.032				−0.046
		(0.210)				(0.220)
Temp.			−0.003	−0.003	−0.003	−0.003
			(0.003)	(0.003)	(0.003)	(0.003)
Precip. × *Temp.*					−0.012	−0.013
					(0.010)	(0.010)
Constant	−0.249*	−0.249*	0.501	0.484	0.480	0.471
	(0.138)	(0.138)	(0.909)	(0.909)	(0.910)	(0.911)
Observations	21,296	21,296	21,296	21,296	21,296	21,296
Log Likelihood	−13,871.360	−13,871.340	−13,871.010	−13,871.490	−13,870.220	−13,870.190
Akaike Inf. Crit.	27,840.710	27,842.690	27,842.010	27,840.970	27,842.430	27,844.390
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.2 Arlington (Texas)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.027	0.026	0.030	0.030	0.030	0.029
	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)
Precip.	−0.030	−0.091	−0.030		1.267	−0.972
	(0.055)	(0.075)	(0.055)		(2.851)	(3.540)
Night × *Precip.*		0.133				0.148
		(0.112)				(0.137)
Temp.			0.002	0.002	0.002	0.002
			(0.002)	(0.002)	(0.002)	(0.002)
Precip. × *Temp.*					−0.004	0.003
					(0.010)	(0.012)
Constant	0.178***	0.178***	−0.403	−0.404	−0.397	−0.374
	(0.066)	(0.066)	(0.558)	(0.558)	(0.558)	(0.559)
Observations	76,152	76,152	76,152	76,152	76,152	76,152
Log Likelihood	−52,293.970	−52,293.250	−52,293.420	−52,293.570	−52,293.310	−52,292.720
Akaike Inf. Crit.	104,673.900	104,674.500	104,674.800	104,673.100	104,676.600	104,677.400
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.3 Aurora (Colorado)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.018	0.018	−0.004	−0.004	−0.003	−0.003
	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)
Precip.	0.079	0.078	0.045		3.302	3.560
	(0.078)	(0.085)	(0.079)		(2.862)	(3.009)
Night × *Precip.*		0.004				−0.061
		(0.211)				(0.223)
Temp.			−0.007***	−0.007***	−0.007***	−0.007***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					−0.011	−0.012
					(0.010)	(0.010)
Constant	−0.580***	−0.580***	1.485***	1.500***	1.443***	1.439***
	(0.060)	(0.060)	(0.348)	(0.347)	(0.350)	(0.350)
Observations	150,600	150,600	150,600	150,600	150,600	150,600
Log Likelihood	−86,046.090	−86,046.090	−86,028.000	−86,028.150	−86,027.340	−86,027.300
Akaike Inf. Crit.	172,186.200	172,188.200	172,152.000	172,150.300	172,152.700	172,154.600
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.4 Bakersfield (California)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.099*	0.101*	0.101*	0.100*	0.103*	0.103*
	(0.056)	(0.056)	(0.056)	(0.056)	(0.056)	(0.056)
Precip.	0.311	0.364	0.320		−19.663	−19.288
	(0.229)	(0.260)	(0.230)		(12.263)	(12.495)
Night × *Precip.*		−0.223				−0.085
		(0.535)				(0.547)
Temp.			0.001	0.001	0.001	0.001
			(0.002)	(0.002)	(0.002)	(0.002)
Precip. × *Temp.*					0.070	0.069
					(0.043)	(0.044)
Constant	−1.627***	−1.628***	−1.876***	−1.777***	−1.859***	−1.864***
	(0.097)	(0.097)	(0.679)	(0.675)	(0.679)	(0.680)
Observations	90,424	90,424	90,424	90,424	90,424	90,424
Log Likelihood	−41,557.620	−41,557.540	−41,557.550	−41,558.490	−41,556.280	−41,556.270
Akaike Inf. Crit.	83,215.240	83,217.070	83,217.110	83,216.970	83,216.560	83,218.540
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.5 Burlington (Vermont)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.021	−0.029	−0.042	−0.044	−0.041	−0.053
	(0.116)	(0.116)	(0.116)	(0.116)	(0.116)	(0.116)
Precip.	0.119	−0.009	0.143		−1.681	−3.833
	(0.136)	(0.208)	(0.135)		(5.107)	(5.512)
Night × Precip.		0.251				0.354
		(0.279)				(0.284)
Temp.			−0.014***	−0.013***	−0.014***	−0.014***
			(0.004)	(0.004)	(0.004)	(0.004)
Precip. × Temp.					0.006	0.013
					(0.018)	(0.019)
Constant	−2.141***	−2.137***	1.656	1.593	1.655	1.750
	(0.167)	(0.167)	(1.203)	(1.201)	(1.203)	(1.205)
Observations	27,346	27,346	27,346	27,346	27,346	27,346
Log Likelihood	−7,969.127	−7,968.712	−7,964.064	−7,964.587	−7,964.000	−7,963.209
Akaike Inf. Crit.	16,034.250	16,035.420	16,026.130	16,025.170	16,028.000	16,028.420
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.6 Camden (New Jersey)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.184***	0.190***	0.179***	0.178***	0.179***	0.185***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Precip.	0.038	0.072**	0.040		0.326	0.912
	(0.027)	(0.032)	(0.027)		(1.014)	(1.049)
Night × Precip.		−0.137**				−0.142**
		(0.062)				(0.063)
Temp.			−0.003**	−0.003*	−0.003**	−0.003*
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.001	−0.003
					(0.003)	(0.004)
Constant	1.239***	1.234***	2.014***	1.997***	2.014***	1.965***
	(0.059)	(0.059)	(0.391)	(0.390)	(0.391)	(0.391)
Observations	119,651	119,651	119,651	119,651	119,651	119,651
Log Likelihood	−70,558.340	−70,555.960	−70,556.320	−70,557.450	−70,556.280	−70,553.830
Akaike Inf. Crit.	141,212.700	141,209.900	141,210.600	141,210.900	141,212.600	141,209.700
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.7 Charlotte (North Carolina)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.058***	0.059***	0.062***	0.064***	0.063***	0.063***
	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)
Precip.	−0.056***	−0.051**	−0.057***		−2.182***	−2.194***
	(0.019)	(0.025)	(0.019)		(0.745)	(0.763)
Night × Precip.		−0.014				0.003
		(0.039)				(0.040)
Temp.			0.002***	0.002***	0.002***	0.002***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.007***	0.007***
					(0.003)	(0.003)
Constant	0.568***	0.568***	−0.088	−0.084	−0.070	−0.070
	(0.026)	(0.026)	(0.184)	(0.184)	(0.184)	(0.185)
Observations	527,560	527,560	527,560	527,560	527,560	527,560
Log Likelihood	−352,457.800	−352,457.700	−352,451.300	−352,455.700	−352,447.200	−352,447.200
Akaike Inf. Crit.	705,009.600	705,011.400	704,998.600	705,005.400	704,992.500	704,994.500
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.8 Cincinnati (Ohio)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.029	−0.027	−0.034	−0.034	−0.034	−0.032
	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)
Precip.	−0.037	0.012	−0.032		−1.162	−0.578
	(0.029)	(0.038)	(0.029)		(1.217)	(1.260)
Night × Precip.		−0.119**				−0.106*
		(0.059)				(0.060)
Temp.			−0.003***	−0.003***	−0.003***	−0.003***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.004	0.002
					(0.004)	(0.004)
Constant	0.604***	0.603***	1.351***	1.367***	1.351***	1.333***
	(0.039)	(0.039)	(0.262)	(0.262)	(0.262)	(0.263)
Observations	195,030	195,030	195,030	195,030	195,030	195,030
Log Likelihood	−128,918.100	−128,916.100	−128,914.000	−128,914.600	−128,913.600	−128,912.000
Akaike Inf. Crit.	257,936.300	257,934.100	257,930.000	257,929.200	257,931.100	257,930.100
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.9 Columbus (Ohio)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.157***	0.159***	0.157***	0.157***	0.157***	0.160***
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Precip.	−0.065	0.011	−0.066		0.613	1.967
	(0.048)	(0.065)	(0.048)		(1.776)	(1.898)
Night × *Precip.*		−0.170*				−0.207**
		(0.097)				(0.104)
Temp.			0.0001	−0.00003	0.0001	0.0002
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					−0.002	−0.007
					(0.006)	(0.006)
Constant	−0.017	−0.018	−0.043	−0.010	−0.042	−0.069
	(0.047)	(0.047)	(0.331)	(0.330)	(0.331)	(0.331)
Observations	113,111	113,111	113,111	113,111	113,111	113,111
Log Likelihood	−76,977.520	−76,976.000	−76,977.510	−76,978.440	−76,977.440	−76,975.450
Akaike Inf. Crit.	154,049.000	154,048.000	154,051.000	154,050.900	154,052.900	154,050.900
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.10 Durham (North Carolina)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.017	0.017	0.012	0.012	0.012	0.012
	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)
Precip.	0.026	0.026	0.027		0.120	0.101
	(0.036)	(0.042)	(0.036)		(1.419)	(1.460)
Night × *Precip.*		−0.001				0.005
		(0.081)				(0.083)
Temp.			−0.002*	−0.002*	−0.002*	−0.002*
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					−0.0003	−0.0003
					(0.005)	(0.005)
Constant	1.205***	1.205***	1.869***	1.864***	1.868***	1.869***
	(0.061)	(0.061)	(0.395)	(0.395)	(0.395)	(0.396)
Observations	113,001	113,001	113,001	113,001	113,001	113,001
Log Likelihood	−69,928.200	−69,928.200	−69,926.760	−69,927.040	−69,926.760	−69,926.750
Akaike Inf. Crit.	139,950.400	139,952.400	139,949.500	139,948.100	139,951.500	139,953.500
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.11 Fayetteville (North Carolina)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.004	−0.003	−0.004	−0.004	−0.005	−0.003
	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)
Precip.	−0.032	−0.026	−0.032		1.182	1.512
	(0.024)	(0.029)	(0.025)		(1.017)	(1.083)
Night × Precip.		−0.023				−0.051
		(0.055)				(0.058)
Temp.			−0.0001	−0.0001	−0.0001	−0.00001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.004	−0.005
					(0.003)	(0.004)
Constant	0.761***	0.760***	0.779***	0.795***	0.776***	0.764***
	(0.043)	(0.043)	(0.295)	(0.295)	(0.295)	(0.296)
Observations	195,610	195,610	195,610	195,610	195,610	195,610
Log Likelihood	−129,042.000	−129,041.900	−129,042.000	−129,042.900	−129,041.300	−129,040.900
Akaike Inf. Crit.	258,178.000	258,179.800	258,180.000	258,179.700	258,180.500	258,181.800
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.12 Garland (Texas)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.012	−0.010	−0.014	−0.014	−0.014	−0.011
	(0.065)	(0.065)	(0.065)	(0.065)	(0.065)	(0.065)
Precip.	−0.035	−0.015	−0.036		−0.568	−0.218
	(0.056)	(0.057)	(0.056)		(2.364)	(2.352)
Night × Precip.		−0.296				−0.291
		(0.239)				(0.240)
Temp.			−0.001	−0.001	−0.001	−0.001
			(0.002)	(0.002)	(0.002)	(0.002)
Precip. × Temp.					0.002	0.001
					(0.008)	(0.008)
Constant	−0.809	−0.811	−0.510	−0.520	−0.507	−0.523
	(0.610)	(0.610)	(0.760)	(0.759)	(0.760)	(0.760)
Observations	88,013	88,013	88,013	88,013	88,013	88,013
Log Likelihood	−53,836.560	−53,835.690	−53,836.340	−53,836.550	−53,836.310	−53,835.490
Akaike Inf. Crit.	107,771.100	107,771.400	107,772.700	107,771.100	107,774.600	107,775.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.13 Grand Forks (North Dakota)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.166^{*}	0.169^{*}	0.158	0.158	0.160	0.161
	(0.099)	(0.099)	(0.099)	(0.099)	(0.099)	(0.099)
Precip.	0.035	0.165	0.034		-8.000^{*}	-7.498^{*}
	(0.105)	(0.171)	(0.105)		(4.169)	(4.385)
Night × *Precip.*		−0.199				−0.091
		(0.225)				(0.245)
Temp.			−0.003	−0.003	−0.003	−0.003
			(0.003)	(0.003)	(0.003)	(0.003)
Precip. × *Temp.*					0.028^{*}	0.026^{*}
					(0.014)	(0.015)
Constant	-2.491^{***}	-2.493^{***}	-1.628^{*}	-1.625^{*}	-1.560^{*}	-1.566^{*}
	(0.148)	(0.148)	(0.919)	(0.919)	(0.919)	(0.919)
Observations	35,467	35,467	35,467	35,467	35,467	35,467
Log Likelihood	−10,284.920	−10,284.530	−10,284.470	−10,284.520	−10,282.490	−10,282.420
Akaike Inf. Crit.	20,665.850	20,667.070	20,666.940	20,665.040	20,664.980	20,666.840
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.14 Greensboro (North Carolina)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.084^{***}	0.089^{***}	0.089^{***}	0.089^{***}	0.090^{***}	0.094^{***}
	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)
Precip.	−0.012	0.050	−0.013		-2.672^{**}	-2.356^{*}
	(0.036)	(0.044)	(0.036)		(1.274)	(1.282)
Night × *Precip.*		-0.182^{**}				-0.180^{**}
		(0.075)				(0.076)
Temp.			0.002^{**}	0.002^{**}	0.002^{**}	0.002^{**}
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					0.009^{**}	0.008^{*}
					(0.004)	(0.004)
Constant	0.725^{***}	0.723^{***}	0.075	0.075	0.098	0.059
	(0.046)	(0.046)	(0.299)	(0.300)	(0.300)	(0.300)
Observations	188,242	188,242	188,242	188,242	188,242	188,242
Log Likelihood	−124,442.600	−124,439.700	−124,440.200	−124,440.300	−124,438.000	−124,435.200
Akaike Inf. Crit.	248,979.300	248,975.400	248,976.400	248,974.600	248,974.000	248,970.400
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.15 Hartford (Connecticut)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.108	0.118	0.113	0.110	0.113	0.125
	(0.126)	(0.126)	(0.126)	(0.126)	(0.126)	(0.126)
Precip.	0.332**	0.385***	0.321**		−2.169	−2.550
	(0.139)	(0.146)	(0.139)		(5.624)	(5.547)
Night × Precip.		−0.522				−0.573
		(0.415)				(0.421)
Temp.			0.006	0.006	0.006	0.006
			(0.004)	(0.004)	(0.004)	(0.004)
Precip. × Temp.					0.009	0.010
					(0.020)	(0.019)
Constant	0.212	0.199	−1.351	−1.502	−1.348	−1.424
	(0.279)	(0.279)	(1.128)	(1.126)	(1.128)	(1.129)
Observations	12,841	12,841	12,841	12,841	12,841	12,841
Log Likelihood	−8,520.514	−8,519.810	−8,519.490	−8,522.215	−8,519.391	−8,518.570
Akaike Inf. Crit.	17,133.030	17,133.620	17,132.980	17,136.430	17,134.780	17,135.140
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.16 Henderson (Nevada)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.089	0.093	0.087	0.087	0.087	0.091
	(0.066)	(0.066)	(0.066)	(0.066)	(0.066)	(0.066)
Precip.	0.563*	0.749**	0.554*		−3.083	−0.961
	(0.291)	(0.331)	(0.292)		(7.900)	(8.155)
Night × Precip.		−0.735				−0.688
		(0.683)				(0.702)
Temp.			−0.001	−0.002	−0.001	−0.001
			(0.003)	(0.003)	(0.003)	(0.003)
Precip. × Temp.					0.012	0.006
					(0.027)	(0.028)
Constant	−1.814***	−1.815***	−1.398*	−1.307	−1.388	−1.433*
	(0.119)	(0.119)	(0.849)	(0.847)	(0.849)	(0.850)
Observations	85,355	85,355	85,355	85,355	85,355	85,355
Log Likelihood	−30,902.470	−30,901.870	−30,902.350	−30,904.050	−30,902.240	−30,901.740
Akaike Inf. Crit.	61,904.930	61,905.730	61,906.690	61,908.100	61,908.480	61,909.490
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.17 Little Rock (Arkansas)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.078	−0.081	−0.087	−0.087	−0.087	−0.094
	(0.138)	(0.138)	(0.138)	(0.138)	(0.138)	(0.138)
Precip.	0.035	0.008	0.035		-8.186^{*}	-9.727^{*}
	(0.070)	(0.081)	(0.070)		(4.925)	(5.133)
Night × Precip.		0.117				0.218
		(0.181)				(0.202)
Temp.			−0.004	−0.004	−0.004	−0.004
			(0.004)	(0.004)	(0.004)	(0.004)
Precip. × Temp.					0.028^{*}	0.033^{*}
					(0.017)	(0.017)
Constant	0.738^{***}	0.737^{***}	1.800	1.800	1.889	1.969^{*}
	(0.186)	(0.186)	(1.163)	(1.163)	(1.164)	(1.166)
Observations	12,719	12,719	12,719	12,719	12,719	12,719
Log Likelihood	−8,534.166	−8,533.936	−8,533.738	−8,533.864	−8,532.318	−8,531.635
Akaike Inf. Crit.	17,152.330	17,153.870	17,153.470	17,151.730	17,152.640	17,153.270
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.18 Los Angeles (California)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.010	−0.008	−0.013	−0.013	−0.013	−0.011
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Precip.	0.012	0.140^{***}	−0.001		-3.515^{*}	0.277
	(0.030)	(0.036)	(0.030)		(2.078)	(2.179)
Night × Precip.		-0.377^{***}				-0.368^{***}
		(0.062)				(0.065)
Temp.			-0.002^{***}	-0.002^{***}	-0.002^{***}	-0.002^{***}
			(0.0004)	(0.0004)	(0.0004)	(0.0004)
Precip. × Temp.					0.012^{*}	−0.001
					(0.007)	(0.008)
Constant	0.174^{***}	0.174^{***}	0.684^{***}	0.684^{***}	0.689^{***}	0.654^{***}
	(0.013)	(0.013)	(0.121)	(0.121)	(0.121)	(0.121)
Observations	2,268,217	2,268,217	2,268,217	2,268,217	2,268,217	2,268,217
Log Likelihood	−1,525,331.000	−1,525,313.000	−1,525,322.000	−1,525,322.000	−1,525,321.000	−1,525,305.000
Akaike Inf. Crit.	3,050,762.000	3,050,727.000	3,050,746.000	3,050,744.000	3,050,745.000	3,050,715.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.19 Louisville (Kentucky)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.203***	0.207***	0.198***	0.199***	0.197***	0.202***
	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)
Precip.	0.170***	0.214***	0.173***		3.319**	5.355***
	(0.038)	(0.044)	(0.038)		(1.650)	(1.790)
Night × *Precip.*		−0.169*				−0.271***
		(0.086)				(0.096)
Temp.			−0.003**	−0.002*	−0.003**	−0.002*
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					−0.011*	−0.017***
					(0.006)	(0.006)
Constant	−0.547***	−0.549***	0.192	0.127	0.191	0.144
	(0.059)	(0.059)	(0.374)	(0.373)	(0.374)	(0.374)
Observations	100,623	100,623	100,623	100,623	100,623	100,623
Log Likelihood	−63,084.970	−63,083.060	−63,082.970	−63,093.310	−63,081.140	−63,077.040
Akaike Inf. Crit.	126,262.000	126,260.100	126,259.900	126,278.600	126,258.300	126,252.100
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.20 Madison (Wisconsin)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.118***	−0.113***	−0.122***	−0.121***	−0.119***	−0.118***
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Precip.	−0.042	0.009	−0.039		−5.378***	−5.040***
	(0.035)	(0.040)	(0.035)		(1.135)	(1.189)
Night × *Precip.*		−0.174**				−0.073
		(0.077)				(0.079)
Temp.			−0.002*	−0.002*	−0.002*	−0.002*
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					0.018***	0.017***
					(0.004)	(0.004)
Constant	−0.593***	−0.595***	−0.124	−0.111	−0.095	−0.105
	(0.052)	(0.052)	(0.287)	(0.287)	(0.287)	(0.287)
Observations	172,252	172,252	172,252	172,252	172,252	172,252
Log Likelihood	−92,563.630	−92,561.020	−92,562.250	−92,562.900	−92,550.700	−92,550.270
Akaike Inf. Crit.	185,225.300	185,222.000	185,224.500	185,223.800	185,203.400	185,204.500
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.21 Mesa (Arizona)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.166*	0.161	0.166*	0.168*	0.166*	0.160
	(0.098)	(0.098)	(0.098)	(0.098)	(0.098)	(0.098)
Precip.	−0.976**	−1.402**	−0.980**		−12.772	−15.163
	(0.384)	(0.553)	(0.385)		(12.585)	(12.583)
Night × Precip.		0.886				0.997
		(0.756)				(0.757)
Temp.			−0.001	0.0002	−0.001	−0.001
			(0.004)	(0.004)	(0.004)	(0.004)
Precip. × Temp.					0.040	0.047
					(0.043)	(0.043)
Constant	−2.277***	−2.274***	−2.073*	−2.330*	−2.034	−1.925
	(0.148)	(0.148)	(1.242)	(1.236)	(1.243)	(1.246)
Observations	67,000	67,000	67,000	67,000	67,000	67,000
Log Likelihood	−20,662.870	−20,662.190	−20,662.850	−20,666.660	−20,662.410	−20,661.560
Akaike Inf. Crit.	41,417.730	41,418.380	41,419.710	41,425.330	41,420.820	41,421.120
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.22 Nashville (Tennessee)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.019**	0.024***	0.015*	0.015*	0.015*	0.021***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Precip.	0.108***	0.162***	0.111***		1.748***	2.609***
	(0.006)	(0.007)	(0.006)		(0.234)	(0.243)
Night × Precip.		−0.150***				−0.177***
		(0.012)				(0.013)
Temp.			−0.002***	−0.002***	−0.002***	−0.002***
			(0.0003)	(0.0003)	(0.0003)	(0.0003)
Precip. × Temp.					−0.006***	−0.008***
					(0.001)	(0.001)
Constant	−0.141***	−0.144***	0.395***	0.327***	0.388***	0.332***
	(0.011)	(0.011)	(0.074)	(0.074)	(0.074)	(0.074)
Observations	2,444,249	2,444,249	2,444,249	2,444,249	2,444,249	2,444,249
Log Likelihood	−1,642,473.000	−1,642,398.000	−1,642,446.000	−1,642,621.000	−1,642,422.000	−1,642,324.000
Akaike Inf. Crit.	3,285,046.000	3,284,899.000	3,284,994.000	3,285,341.000	3,284,947.000	3,284,755.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.23 New Orleans (Louisiana)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.013	0.013	0.011	0.011	0.012	0.011
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
Precip.	−0.031**	−0.028*	−0.030**		−1.909**	−2.420**
	(0.014)	(0.017)	(0.014)		(0.910)	(1.067)
Night × Precip.		−0.010				0.033
		(0.031)				(0.036)
Temp.			−0.001	−0.001	−0.001	−0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.006**	0.008**
					(0.003)	(0.004)
Constant	0.979***	0.979***	1.283***	1.293***	1.276***	1.289***
	(0.031)	(0.031)	(0.283)	(0.283)	(0.283)	(0.284)
Observations	406,499	406,499	406,499	406,499	406,499	406,499
Log Likelihood	−236,901.800	−236,901.700	−236,901.200	−236,903.500	−236,899.100	−236,898.700
Akaike Inf. Crit.	473,903.600	473,905.500	473,904.400	473,907.100	473,902.100	473,903.300
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.24 Oakland (California)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.202***	−0.200***	−0.192***	−0.192***	−0.192***	−0.183***
	(0.049)	(0.049)	(0.049)	(0.049)	(0.049)	(0.049)
Precip.	0.112	0.315	0.122		33.540**	59.554***
	(0.133)	(0.224)	(0.133)		(14.742)	(17.592)
Night × Precip.		−0.325				−0.924***
		(0.277)				(0.325)
Temp.			0.005*	0.005*	0.006**	0.006**
			(0.003)	(0.003)	(0.003)	(0.003)
Precip. × Temp.					−0.117**	−0.206***
					(0.052)	(0.061)
Constant	1.902***	1.901***	0.344	0.374	0.310	0.049
	(0.076)	(0.076)	(0.809)	(0.808)	(0.809)	(0.815)
Observations	91,049	91,049	91,049	91,049	91,049	91,049
Log Likelihood	−40,178.890	−40,178.180	−40,177.020	−40,177.450	−40,174.340	−40,170.170
Akaike Inf. Crit.	80,451.780	80,452.370	80,450.030	80,448.890	80,446.680	80,440.330
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.25 Oklahoma City (Oklahoma)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.014	−0.013	−0.019	−0.019	−0.019	−0.018
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Precip.	0.057***	0.088***	0.057***		0.808	1.017
	(0.019)	(0.026)	(0.019)		(0.859)	(0.863)
Night × *Precip.*		−0.061*				−0.063*
		(0.037)				(0.037)
Temp.			−0.002***	−0.002***	−0.002***	−0.002***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					−0.003	−0.003
					(0.003)	(0.003)
Constant	−0.836***	−0.837***	−0.362**	−0.359**	−0.367**	−0.380**
	(0.028)	(0.028)	(0.173)	(0.173)	(0.173)	(0.173)
Observations	667,262	667,262	667,262	667,262	667,262	667,262
Log Likelihood	−346,357.700	−346,356.300	−346,353.800	−346,358.400	−346,353.400	−346,352.000
Akaike Inf. Crit.	692,813.400	692,812.600	692,807.600	692,814.900	692,808.900	692,808.100
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.26 Owensboro (Kentucky)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.564**	0.569**	0.536**	0.535**	0.543**	0.543**
	(0.235)	(0.235)	(0.236)	(0.235)	(0.236)	(0.236)
Precip.	−0.082	0.013	−0.046		−15.525	−15.415
	(0.254)	(0.348)	(0.251)		(13.982)	(14.474)
Night × *Precip.*		−0.184				−0.014
		(0.505)				(0.482)
Temp.			−0.012	−0.012	−0.011	−0.011
			(0.008)	(0.007)	(0.008)	(0.008)
Precip. × *Temp.*					0.052	0.052
					(0.047)	(0.048)
Constant	−1.927***	−1.930***	1.435	1.470	1.321	1.320
	(0.339)	(0.340)	(2.205)	(2.196)	(2.208)	(2.208)
Observations	6,652	6,652	6,652	6,652	6,652	6,652
Log Likelihood	−2,367.721	−2,367.655	−2,366.531	−2,366.549	−2,365.879	−2,365.879
Akaike Inf. Crit.	4,825.443	4,827.310	4,825.062	4,823.097	4,825.759	4,827.758
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.27 Philadelphia (Pennsylvania)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.057***	0.060***	0.057***	0.057***	0.057***	0.060***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Precip.	−0.018**	0.020	−0.018**		−0.737**	−0.381
	(0.009)	(0.012)	(0.009)		(0.341)	(0.353)
Night × Precip.		−0.090***				−0.086***
		(0.019)				(0.019)
Temp.			0.0001	0.0001	0.0001	0.0002
			(0.0004)	(0.0004)	(0.0004)	(0.0004)
Precip. × Temp.					0.002**	0.001
					(0.001)	(0.001)
Constant	1.087***	1.085***	1.059***	1.069***	1.060***	1.033***
	(0.015)	(0.015)	(0.115)	(0.115)	(0.115)	(0.115)
Observations	1,540,120	1,540,120	1,540,120	1,540,120	1,540,120	1,540,120
Log Likelihood	−825,179.500	−825,167.800	−825,179.500	−825,181.400	−825,177.200	−825,167.000
Akaike Inf. Crit.	1,650,453.000	1,650,432.000	1,650,455.000	1,650,457.000	1,650,452.000	1,650,434.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.28 Plano (Texas)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.063	0.065	0.065	0.065	0.066	0.067
	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)
Precip.	−0.072	0.008	−0.072		−4.597	−3.533
	(0.062)	(0.074)	(0.062)		(2.819)	(2.875)
Night × Precip.		−0.239*				−0.203
		(0.138)				(0.140)
Temp.			0.001	0.001	0.001	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.015	0.012
					(0.009)	(0.010)
Constant	−0.987***	−0.986***	−1.297***	−1.299***	−1.287***	−1.306***
	(0.068)	(0.068)	(0.374)	(0.374)	(0.374)	(0.374)
Observations	179,181	179,181	179,181	179,181	179,181	179,181
Log Likelihood	−85,140.340	−85,138.740	−85,139.980	−85,140.680	−85,138.660	−85,137.560
Akaike Inf. Crit.	170,372.700	170,371.500	170,374.000	170,373.400	170,373.300	170,373.100
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.29 Raleigh (North Carolina)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.074***	0.079***	0.072**	0.071**	0.072**	0.076***
	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)
Precip.	0.108***	0.184***	0.109***		0.524	1.057
	(0.024)	(0.035)	(0.024)		(0.903)	(0.914)
Night × Precip.		−0.159***				−0.163***
		(0.049)				(0.049)
Temp.			−0.001	−0.001	−0.001	−0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.001	−0.003
					(0.003)	(0.003)
Constant	0.265***	0.262***	0.606***	0.585**	0.604***	0.561**
	(0.036)	(0.036)	(0.234)	(0.234)	(0.234)	(0.234)
Observations	288,739	288,739	288,739	288,739	288,739	288,739
Log Likelihood	−196,500.100	−196,494.700	−196,499.000	−196,509.300	−196,498.900	−196,493.400
Akaike Inf. Crit.	393,094.100	393,085.500	393,094.000	393,112.600	393,095.800	393,086.800
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.30 Saint Paul (Minnesota)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.175***	−0.176***	−0.173***	−0.174***	−0.173***	−0.175***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Precip.	−0.036	−0.083	−0.037		−0.825	−1.073
	(0.038)	(0.058)	(0.038)		(1.460)	(1.486)
Night × Precip.		0.083				0.088
		(0.077)				(0.078)
Temp.			0.0005	0.0004	0.0005	0.0004
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.003	0.003
					(0.005)	(0.005)
Constant	0.548***	0.549***	0.420	0.432	0.419	0.427
	(0.044)	(0.044)	(0.300)	(0.299)	(0.300)	(0.300)
Observations	117,975	117,975	117,975	117,975	117,975	117,975
Log Likelihood	−79,394.110	−79,393.510	−79,394.010	−79,394.500	−79,393.870	−79,393.210
Akaike Inf. Crit.	158,884.200	158,885.000	158,886.000	158,885.000	158,887.700	158,888.400
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.31 San Antonio (Texas)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.056**	0.057**	0.058**	0.058**	0.058**	0.058**
	(0.024)	(0.024)	(0.025)	(0.025)	(0.025)	(0.025)
Precip.	−0.050*	−0.047	−0.049*		−1.430	−1.552
	(0.028)	(0.034)	(0.028)		(1.505)	(1.626)
Night × Precip.		−0.006				0.012
		(0.058)				(0.062)
Temp.			0.001	0.001	0.001	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.005	0.005
					(0.005)	(0.005)
Constant	−1.293***	−1.293***	−1.525***	−1.540***	−1.519***	−1.516***
	(0.035)	(0.035)	(0.249)	(0.249)	(0.249)	(0.249)
Observations	470,451	470,451	470,451	470,451	470,451	470,451
Log Likelihood	−241,408.900	−241,408.900	−241,408.500	−241,410.100	−241,408.000	−241,408.000
Akaike Inf. Crit.	482,915.800	482,917.800	482,916.900	482,918.100	482,918.100	482,920.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.32 San Diego (California)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.097**	−0.098***	−0.096**	−0.097**	−0.096**	−0.095**
	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)
Precip.	0.153	0.130	0.157		8.786*	9.278*
	(0.097)	(0.119)	(0.098)		(5.037)	(5.323)
Night × Precip.		0.070				−0.062
		(0.205)				(0.216)
Temp.			0.001	0.0003	0.001	0.001
			(0.002)	(0.002)	(0.002)	(0.002)
Precip. × Temp.					−0.030*	−0.032*
					(0.018)	(0.019)
Constant	−1.103***	−1.102***	−1.307**	−1.195**	−1.346**	−1.358**
	(0.049)	(0.049)	(0.552)	(0.548)	(0.553)	(0.554)
Observations	198,938	198,938	198,938	198,938	198,938	198,938
Log Likelihood	−99,679.570	−99,679.510	−99,679.500	−99,680.760	−99,677.910	−99,677.870
Akaike Inf. Crit.	199,451.100	199,453.000	199,453.000	199,453.500	199,451.800	199,453.700
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.33 San Francisco (California)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.088***	−0.087***	−0.082***	−0.082***	−0.082***	−0.080***
	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)
Precip.	−0.187***	−0.103	−0.184***		2.232	5.518
	(0.063)	(0.082)	(0.063)		(9.514)	(9.563)
Night × *Precip.*		−0.192				−0.237*
		(0.125)				(0.128)
Temp.			0.016***	0.016***	0.016***	0.017***
			(0.004)	(0.004)	(0.004)	(0.004)
Precip. × *Temp.*					−0.008	−0.020
					(0.033)	(0.034)
Constant	−0.448***	−0.448***	−5.012***	−5.053***	−5.036***	−5.184***
	(0.035)	(0.035)	(1.063)	(1.062)	(1.067)	(1.070)
Observations	251,569	251,569	251,569	251,569	251,569	251,569
Log Likelihood	−150,861.500	−150,860.300	−150,852.200	−150,856.700	−150,852.200	−150,850.500
Akaike Inf. Crit.	301,818.900	301,818.600	301,802.500	301,809.400	301,804.400	301,802.900
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.34 San Jose (California)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.012	0.014	0.013	0.013	0.013	0.017
	(0.061)	(0.061)	(0.062)	(0.062)	(0.062)	(0.062)
Precip.	−0.032	0.118	−0.031		−1.314	3.595
	(0.124)	(0.206)	(0.124)		(13.325)	(14.283)
Night × *Precip.*		−0.227				−0.258
		(0.255)				(0.275)
Temp.			0.001	0.001	0.001	0.001
			(0.003)	(0.003)	(0.003)	(0.003)
Precip. × *Temp.*					0.005	−0.012
					(0.047)	(0.050)
Constant	−0.108	−0.109	−0.255	−0.261	−0.253	−0.353
	(0.092)	(0.092)	(0.880)	(0.880)	(0.880)	(0.887)
Observations	38,581	38,581	38,581	38,581	38,581	38,581
Log Likelihood	−24,247.400	−24,247.010	−24,247.390	−24,247.420	−24,247.380	−24,246.950
Akaike Inf. Crit.	48,590.810	48,592.030	48,592.780	48,590.840	48,594.770	48,595.900
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.35 Tulsa (Oklahoma)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.007	0.008	0.001	0.0005	0.001	0.002
	(0.036)	(0.036)	(0.036)	(0.036)	(0.036)	(0.036)
Precip.	0.048	0.071**	0.049		0.163	0.413
	(0.032)	(0.036)	(0.032)		(1.250)	(1.257)
Night × Precip.		−0.108				−0.106
		(0.081)				(0.081)
Temp.			−0.002***	−0.002***	−0.002***	−0.002***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.0004	−0.001
					(0.004)	(0.004)
Constant	−0.511***	−0.512***	0.205	0.205	0.205	0.195
	(0.050)	(0.050)	(0.253)	(0.253)	(0.253)	(0.253)
Observations	280,612	280,612	280,612	280,612	280,612	280,612
Log Likelihood	−152,118.600	−152,117.600	−152,114.400	−152,115.500	−152,114.400	−152,113.500
Akaike Inf. Crit.	304,333.100	304,333.300	304,326.800	304,327.000	304,328.800	304,329.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.36 Wichita (Kansas)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.005	−0.005	−0.009	−0.009	−0.008	−0.009
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)
Precip.	0.010	0.009	0.010		−0.940	−1.083
	(0.023)	(0.028)	(0.023)		(0.904)	(0.954)
Night × Precip.		0.003				0.024
		(0.049)				(0.051)
Temp.			−0.002*	−0.002*	−0.002*	−0.002**
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.003	0.004
					(0.003)	(0.003)
Constant	−1.321***	−1.321***	−0.825***	−0.826***	−0.820***	−0.814***
	(0.061)	(0.061)	(0.263)	(0.263)	(0.263)	(0.263)
Observations	290,091	290,091	290,091	290,091	290,091	290,091
Log Likelihood	−142,928.400	−142,928.400	−142,926.500	−142,926.600	−142,925.900	−142,925.800
Akaike Inf. Crit.	285,952.700	285,954.700	285,951.000	285,949.200	285,951.900	285,953.600
Note:						*p<0.1; **p<0.05; ***p<0.01

5.1.37 Winston-Salem (North Carolina)

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.040	0.040	0.040	0.040	0.039	0.040
	(0.033)	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)
Precip.	−0.014	−0.011	−0.014		1.041	1.103
	(0.032)	(0.045)	(0.032)		(1.218)	(1.246)
Night × Precip.		−0.005				−0.016
		(0.065)				(0.066)
Temp.			−0.0001	−0.0001	−0.0001	−0.0001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.004	−0.004
					(0.004)	(0.004)
Constant	0.160***	0.159***	0.195	0.199	0.186	0.183
	(0.045)	(0.045)	(0.333)	(0.333)	(0.334)	(0.334)
Observations	150,475	150,475	150,475	150,475	150,475	150,475
Log Likelihood	−103,239.800	−103,239.800	−103,239.800	−103,239.900	−103,239.400	−103,239.400
Akaike Inf. Crit.	206,573.700	206,575.600	206,575.600	206,573.800	206,576.900	206,578.800
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2 State Police Departments

5.2.1 Connecticut

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.016	−0.013	−0.013	−0.013	−0.013	−0.009
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Precip.	0.079***	0.143***	0.075***		0.221	1.753**
	(0.019)	(0.025)	(0.019)		(0.629)	(0.720)
Night × Precip.		−0.140***				−0.191***
		(0.038)				(0.044)
Temp.			0.002***	0.002***	0.002***	0.002***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.001	−0.005**
					(0.002)	(0.002)
Constant	−1.418***	−1.420***	−1.943***	−1.995***	−1.941***	−1.970***
	(0.024)	(0.024)	(0.198)	(0.197)	(0.198)	(0.198)
Observations	948,360	948,360	948,360	948,360	948,360	948,360
Log Likelihood	−413,040.400	−413,033.600	−413,036.800	−413,044.200	−413,036.800	−413,027.100
Akaike Inf. Crit.	826,170.700	826,159.100	826,165.600	826,178.400	826,167.500	826,150.100
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.2 Florida

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.087***	−0.086***	−0.088***	−0.088***	−0.088***	−0.087***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Precip.	0.009*	0.014**	0.009*		−0.733*	−0.322
	(0.005)	(0.005)	(0.005)		(0.395)	(0.420)
Night × Precip.		−0.064***				−0.057***
		(0.020)				(0.021)
Temp.			−0.001***	−0.001***	−0.001***	−0.001***
			(0.0003)	(0.0003)	(0.0003)	(0.0003)
Precip. × Temp.					0.002*	0.001
					(0.001)	(0.001)
Constant	−0.698***	−0.698***	−0.478***	−0.477***	−0.475***	−0.483***
	(0.011)	(0.011)	(0.083)	(0.083)	(0.084)	(0.084)
Observations	5,231,498	5,231,498	5,231,498	5,231,498	5,231,498	5,231,498
Log Likelihood	−2,897,591.000	−2,897,585.000	−2,897,587.000	−2,897,589.000	−2,897,586.000	−2,897,582.000
Akaike Inf. Crit.	5,795,282.000	5,795,273.000	5,795,277.000	5,795,278.000	5,795,275.000	5,795,270.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.3 Georgia

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.009	−0.007	0.024*	0.023*	0.024*	0.026**
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Precip.	0.017*	0.031***	0.010		−1.024**	−0.448
	(0.010)	(0.011)	(0.010)		(0.469)	(0.498)
Night × Precip.		−0.074***				−0.098***
		(0.027)				(0.029)
Temp.			0.017***	0.017***	0.017***	0.017***
			(0.0005)	(0.0005)	(0.0005)	(0.0005)
Precip. × Temp.					0.003**	0.002
					(0.002)	(0.002)
Constant	−0.435***	−0.435***	−5.490***	−5.493***	−5.488***	−5.508***
	(0.022)	(0.022)	(0.144)	(0.144)	(0.144)	(0.144)
Observations	900,697	900,697	900,697	900,697	900,697	900,697
Log Likelihood	−552,599.400	−552,595.700	−551,968.000	−551,968.400	−551,965.600	−551,959.800
Akaike Inf. Crit.	1,105,293.000	1,105,287.000	1,104,032.000	1,104,031.000	1,104,029.000	1,104,020.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.4 Michigan

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.022	0.023	0.071***	0.071***	0.071***	0.073***
	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)
Precip.	−0.062*	−0.042	−0.113***		−3.121***	−2.725**
	(0.033)	(0.039)	(0.035)		(1.057)	(1.117)
Night × Precip.		−0.070				−0.083
		(0.075)				(0.081)
Temp.			0.027***	0.027***	0.027***	0.027***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.010***	0.009**
					(0.004)	(0.004)
Constant	−1.418***	−1.417***	−9.026***	−8.983***	−8.999***	−9.011***
	(0.056)	(0.056)	(0.267)	(0.267)	(0.267)	(0.268)
Observations	298,815	298,815	298,815	298,815	298,815	298,815
Log Likelihood	−136,361.000	−136,360.600	−135,934.200	−135,939.900	−135,930.100	−135,929.600
Akaike Inf. Crit.	272,818.100	272,819.200	271,966.400	271,975.800	271,960.200	271,961.100
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.5 New Hampshire

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	-0.265^{***}	-0.261^{***}	-0.239^{**}	-0.243^{**}	-0.240^{**}	-0.229^{**}
	(0.098)	(0.098)	(0.099)	(0.099)	(0.099)	(0.099)
Precip.	0.209^{**}	0.241^{**}	0.186^{*}		5.976	8.429^{**}
	(0.095)	(0.098)	(0.097)		(3.711)	(3.837)
Night × Precip.		−0.232				-0.529^{*}
		(0.282)				(0.310)
Temp.			0.019^{***}	0.019^{***}	0.019^{***}	0.019^{***}
			(0.004)	(0.004)	(0.004)	(0.004)
Precip. × Temp.					−0.020	-0.028^{**}
					(0.013)	(0.013)
Constant	-2.733^{***}	-2.734^{***}	-7.925^{***}	-8.001^{***}	-7.910^{***}	-8.015^{***}
	(0.138)	(0.138)	(1.009)	(1.009)	(1.009)	(1.012)
Observations	151,953	151,953	151,953	151,953	151,953	151,953
Log Likelihood	−18,246.620	−18,246.260	−18,233.070	−18,234.640	−18,231.860	−18,230.240
Akaike Inf. Crit.	36,581.240	36,582.520	36,556.140	36,557.270	36,555.730	36,554.490
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.6 New York

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	-0.202^{***}	-0.200^{***}	-0.170^{***}	-0.170^{***}	-0.170^{***}	-0.168^{***}
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Precip.	-0.141^{***}	-0.109^{***}	-0.166^{***}		-4.693^{***}	-4.155^{***}
	(0.010)	(0.011)	(0.010)		(0.349)	(0.363)
Night × Precip.		-0.118^{***}				-0.113^{***}
		(0.022)				(0.023)
Temp.			0.026^{***}	0.026^{***}	0.026^{***}	0.026^{***}
			(0.0003)	(0.0003)	(0.0003)	(0.0003)
Precip. × Temp.					0.016^{***}	0.014^{***}
					(0.001)	(0.001)
Constant	-1.444^{***}	-1.444^{***}	-8.755^{***}	-8.727^{***}	-8.723^{***}	-8.737^{***}
	(0.014)	(0.014)	(0.073)	(0.073)	(0.073)	(0.073)
Observations	5,646,136	5,646,136	5,646,136	5,646,136	5,646,136	5,646,136
Log Likelihood	−2,186,106.000	−2,186,092.000	−2,180,900.000	−2,181,056.000	−2,180,815.000	−2,180,803.000
Akaike Inf. Crit.	4,372,311.000	4,372,284.000	4,361,900.000	4,362,210.000	4,361,733.000	4,361,710.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.7 North Dakota

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.145**	−0.144**	−0.145**	−0.145**	−0.145**	−0.143**
	(0.059)	(0.059)	(0.059)	(0.059)	(0.059)	(0.059)
Precip.	0.065	0.093	0.064		1.211	1.667
	(0.106)	(0.117)	(0.106)		(3.655)	(3.692)
Night × *Precip.*		−0.127				−0.152
		(0.259)				(0.269)
Temp.			0.0003	0.0003	0.0004	0.0004
			(0.002)	(0.002)	(0.002)	(0.002)
Precip. × *Temp.*					−0.004	−0.005
					(0.012)	(0.013)
Constant	−3.041***	−3.041***	−3.134***	−3.134***	−3.141***	−3.146***
	(0.093)	(0.093)	(0.531)	(0.531)	(0.531)	(0.531)
Observations	221,428	221,428	221,428	221,428	221,428	221,428
Log Likelihood	−32,529.040	−32,528.920	−32,529.030	−32,529.200	−32,528.980	−32,528.810
Akaike Inf. Crit.	65,152.090	65,153.840	65,154.060	65,152.410	65,155.960	65,157.620
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.8 Ohio

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.032***	−0.033***	−0.040***	−0.040***	−0.040***	−0.041***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Precip.	−0.015	−0.027**	−0.004		0.458	0.246
	(0.009)	(0.013)	(0.009)		(0.347)	(0.366)
Night × *Precip.*		0.030				0.038*
		(0.019)				(0.020)
Temp.			−0.004***	−0.004***	−0.004***	−0.004***
			(0.0002)	(0.0002)	(0.0002)	(0.0002)
Precip. × *Temp.*					−0.002	−0.001
					(0.001)	(0.001)
Constant	−1.701***	−1.700***	−0.548***	−0.546***	−0.549***	−0.543***
	(0.011)	(0.011)	(0.071)	(0.071)	(0.071)	(0.071)
Observations	5,290,376	5,290,376	5,290,376	5,290,376	5,290,376	5,290,376
Log Likelihood	−2,096,305.000	−2,096,304.000	−2,096,169.000	−2,096,169.000	−2,096,168.000	−2,096,167.000
Akaike Inf. Crit.	4,192,708.000	4,192,708.000	4,192,439.000	4,192,437.000	4,192,439.000	4,192,437.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.9 Tennessee

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	0.161***	0.164***	0.208***	0.208***	0.209***	0.213***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Precip.	−0.009	0.031**	−0.037***		−2.807***	−1.473***
	(0.013)	(0.014)	(0.013)		(0.525)	(0.553)
Night × Precip.		−0.177***				−0.228***
		(0.032)				(0.035)
Temp.			0.026***	0.026***	0.026***	0.026***
			(0.0004)	(0.0004)	(0.0004)	(0.0004)
Precip. × Temp.					0.009***	0.005***
					(0.002)	(0.002)
Constant	−1.600***	−1.600***	−9.031***	−9.018***	−9.023***	−9.066***
	(0.021)	(0.021)	(0.128)	(0.128)	(0.128)	(0.128)
Observations	1,789,219	1,789,219	1,789,219	1,789,219	1,789,219	1,789,219
Log Likelihood	−706,514.300	−706,498.100	−704,769.000	−704,773.200	−704,755.200	−704,732.100
Akaike Inf. Crit.	1,413,123.000	1,413,092.000	1,409,634.000	1,409,640.000	1,409,608.000	1,409,564.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.10 Texas

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	−0.023***	−0.022***	−0.015***	−0.015***	−0.015***	−0.014**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Precip.	0.111***	0.142***	0.112***		−0.416	0.647*
	(0.007)	(0.008)	(0.007)		(0.335)	(0.355)
Night × Precip.		−0.128***				−0.144***
		(0.016)				(0.017)
Temp.			0.004***	0.004***	0.004***	0.004***
			(0.0002)	(0.0002)	(0.0002)	(0.0002)
Precip. × Temp.					0.002	−0.002
					(0.001)	(0.001)
Constant	−1.143***	−1.143***	−2.239***	−2.232***	−2.238***	−2.252***
	(0.008)	(0.008)	(0.056)	(0.056)	(0.056)	(0.056)
Observations	8,641,146	8,641,146	8,641,146	8,641,146	8,641,146	8,641,146
Log Likelihood	−3,867,711.000	−3,867,680.000	−3,867,515.000	−3,867,640.000	−3,867,514.000	−3,867,479.000
Akaike Inf. Crit.	7,735,521.000	7,735,460.000	7,735,131.000	7,735,378.000	7,735,130.000	7,735,061.000
Note:						*p<0.1; **p<0.05; ***p<0.01

5.2.11 Wisconsin

	Dependent variable: Black					
	(1)	(2)	(3)	(4)	(5)	(6)
Night	-0.114^{***}	-0.112^{***}	-0.082^{***}	-0.082^{***}	-0.082^{***}	-0.080^{***}
	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)
Precip.	-0.078^{*}	-0.040	-0.103^{**}		-1.172	-0.583
	(0.042)	(0.050)	(0.042)		(1.447)	(1.472)
Night × Precip.		-0.114				-0.147
		(0.090)				(0.094)
Temp.			0.014^{***}	0.014^{***}	0.014^{***}	0.014^{***}
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.004	0.002
					(0.005)	(0.005)
Constant	-1.588^{***}	-1.589^{***}	-5.485^{***}	-5.466^{***}	-5.480^{***}	-5.493^{***}
	(0.037)	(0.037)	(0.231)	(0.230)	(0.231)	(0.231)
Observations	795,948	795,948	795,948	795,948	795,948	795,948
Log Likelihood	−189,542.500	−189,541.600	−189,395.700	−189,399.000	−189,395.500	−189,394.200
Akaike Inf. Crit.	379,180.900	379,181.300	378,889.500	378,893.900	378,890.900	378,890.400
Note:						*p<0.1; **p<0.05; ***p<0.01

6 Regression Results: Citation

6.1 City Police Departments

6.1.1 Charlotte (North Carolina)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.165***	0.165***	0.165***	0.165***	0.165***	0.165***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Night	−0.184***	−0.182***	−0.185***	−0.184***	−0.185***	−0.183***
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Precip.	−0.057***	−0.028	−0.057***		−1.098	−0.841
	(0.019)	(0.024)	(0.019)		(0.702)	(0.722)
Night × Precip.		−0.073*				−0.063
		(0.038)				(0.039)
Temp.			−0.001	−0.001	−0.001	−0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.004	0.003
					(0.002)	(0.002)
Constant	−0.162***	−0.163***	0.019	0.023	0.028	0.015
	(0.025)	(0.025)	(0.175)	(0.175)	(0.175)	(0.175)
Observations	584,129	584,129	584,129	584,129	584,129	584,129
Log Likelihood	−391,124.500	−391,122.700	−391,124.000	−391,128.700	−391,122.900	−391,121.600
Akaike Inf. Crit.	782,345.100	782,343.400	782,346.000	782,353.400	782,345.800	782,345.200
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.2 Columbus (Ohio)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	−0.074***	−0.074***	−0.074***	−0.074***	−0.074***	−0.074***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Night	−0.654***	−0.660***	−0.652***	−0.652***	−0.652***	−0.659***
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.034)
Precip.	−0.186***	−0.328***	−0.191***		−3.825**	−6.606***
	(0.049)	(0.066)	(0.049)		(1.751)	(1.861)
Night × Precip.		0.317***				0.428***
		(0.097)				(0.103)
Temp.			0.001	0.001	0.001	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.012**	0.021***
					(0.006)	(0.006)
Constant	0.555***	0.557***	0.169	0.270	0.165	0.223
	(0.048)	(0.048)	(0.340)	(0.339)	(0.340)	(0.341)
Observations	116,263	116,263	116,263	116,263	116,263	116,263
Log Likelihood	−74,497.990	−74,492.740	−74,497.340	−74,504.950	−74,495.170	−74,486.540
Akaike Inf. Crit.	149,092.000	149,083.500	149,092.700	149,105.900	149,090.300	149,075.100
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.3 Durham (North Carolina)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.045***	0.045***	0.045***	0.045***	0.045***	0.045***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Night	−0.348***	−0.347***	−0.351***	−0.350***	−0.351***	−0.350***
	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)
Precip.	−0.150***	−0.139***	−0.149***		−1.511	−1.446
	(0.033)	(0.040)	(0.033)		(1.303)	(1.336)
Night × Precip.		−0.036				−0.016
		(0.073)				(0.074)
Temp.			−0.002	−0.002	−0.002	−0.002
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.005	0.004
					(0.004)	(0.005)
Constant	−0.236***	−0.236***	0.237	0.269	0.246	0.242
	(0.053)	(0.053)	(0.350)	(0.349)	(0.350)	(0.350)
Observations	128,656	128,656	128,656	128,656	128,656	128,656
Log Likelihood	−86,868.560	−86,868.440	−86,867.620	−86,878.030	−86,867.070	−86,867.050
Akaike Inf. Crit.	173,833.100	173,834.900	173,833.200	173,852.100	173,834.100	173,836.100
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.4 Fayetteville (North Carolina)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.225***	0.225***	0.225***	0.226***	0.225***	0.225***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Night	−0.197***	−0.197***	−0.203***	−0.202***	−0.202***	−0.203***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Precip.	−0.087***	−0.089***	−0.084***		−0.994	−1.198
	(0.025)	(0.029)	(0.025)		(1.014)	(1.075)
Night × Precip.		0.007				0.033
		(0.055)				(0.058)
Temp.			−0.003***	−0.003***	−0.003***	−0.003***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.003	0.004
					(0.003)	(0.004)
Constant	0.270***	0.270***	1.061***	1.102***	1.063***	1.070***
	(0.043)	(0.043)	(0.288)	(0.288)	(0.288)	(0.289)
Observations	209,106	209,106	209,106	209,106	209,106	209,106
Log Likelihood	−135,887.800	−135,887.800	−135,884.000	−135,889.800	−135,883.600	−135,883.400
Akaike Inf. Crit.	271,871.700	271,873.700	271,866.000	271,875.500	271,867.200	271,868.800
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.5 Grand Forks (North Dakota)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.700***	0.700***	0.697***	0.696***	0.697***	0.697***
	(0.184)	(0.184)	(0.184)	(0.184)	(0.184)	(0.184)
Night	−0.256	−0.261	−0.292	−0.289	−0.294	−0.296
	(0.180)	(0.180)	(0.181)	(0.181)	(0.181)	(0.182)
Precip.	0.595	0.330	0.606		16.837	16.050
	(0.577)	(0.862)	(0.580)		(15.090)	(16.061)
Night × *Precip.*		0.423				0.132
		(1.155)				(1.013)
Temp.			−0.012*	−0.012*	−0.012*	−0.012*
			(0.007)	(0.007)	(0.007)	(0.007)
Precip. × *Temp.*					−0.056	−0.053
					(0.051)	(0.054)
Constant	3.183***	3.187***	6.515***	6.501***	6.464***	6.468***
	(0.269)	(0.269)	(1.906)	(1.906)	(1.906)	(1.906)
Observations	35,467	35,467	35,467	35,467	35,467	35,467
Log Likelihood	−2,914.282	−2,914.218	−2,912.718	−2,913.533	−2,912.180	−2,912.171
Akaike Inf. Crit.	5,926.564	5,928.436	5,925.437	5,925.066	5,926.359	5,928.342
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.6 Greensboro (North Carolina)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.022**	0.022**	0.022**	0.022**	0.022**	0.022**
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Night	−0.407***	−0.408***	−0.404***	−0.402***	−0.403***	−0.405***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Precip.	−0.115***	−0.135***	−0.116***		−2.205*	−2.316*
	(0.035)	(0.044)	(0.035)		(1.237)	(1.242)
Night × *Precip.*		0.057				0.062
		(0.074)				(0.074)
Temp.			0.002	0.002	0.002	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					0.007*	0.007*
					(0.004)	(0.004)
Constant	0.074*	0.075*	−0.379	−0.377	−0.361	−0.347
	(0.043)	(0.043)	(0.291)	(0.291)	(0.292)	(0.292)
Observations	199,143	199,143	199,143	199,143	199,143	199,143
Log Likelihood	−131,790.900	−131,790.600	−131,789.600	−131,795.100	−131,788.200	−131,787.900
Akaike Inf. Crit.	263,677.800	263,679.200	263,677.300	263,686.100	263,676.400	263,677.700
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.7 Hartford (Connecticut)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	−0.988***	−0.988***	−0.988***	−0.989***	−0.988***	−0.988***
	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)
Night	−0.074	−0.070	−0.076	−0.078	−0.076	−0.073
	(0.107)	(0.108)	(0.107)	(0.107)	(0.107)	(0.108)
Precip.	−0.266**	−0.250*	−0.258**		−2.099	−2.248
	(0.124)	(0.133)	(0.124)		(4.847)	(4.898)
Night × Precip.		−0.123				−0.125
		(0.374)				(0.371)
Temp.			−0.003	−0.003	−0.003	−0.003
			(0.004)	(0.004)	(0.004)	(0.004)
Precip. × Temp.					0.006	0.007
					(0.017)	(0.017)
Constant	1.495***	1.492***	2.271**	2.441**	2.273**	2.257**
	(0.223)	(0.224)	(1.030)	(1.027)	(1.030)	(1.032)
Observations	17,794	17,794	17,794	17,794	17,794	17,794
Log Likelihood	−10,158.070	−10,158.010	−10,157.770	−10,159.930	−10,157.700	−10,157.640
Akaike Inf. Crit.	20,410.140	20,412.030	20,411.540	20,413.860	20,413.400	20,415.280
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.8 Louisville (Kentucky)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	−0.365***	−0.366***	−0.365***	−0.365***	−0.365***	−0.365***
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Night	−1.059***	−1.053***	−1.049***	−1.049***	−1.046***	−1.043***
	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)
Precip.	−0.090**	−0.005	−0.096**		−7.402***	−6.551***
	(0.044)	(0.059)	(0.044)		(1.925)	(2.076)
Night × Precip.		−0.250**				−0.143
		(0.100)				(0.105)
Temp.			0.005***	0.005***	0.005***	0.005***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.025***	0.022***
					(0.007)	(0.007)
Constant	1.647***	1.644***	0.282	0.322	0.284	0.259
	(0.065)	(0.065)	(0.421)	(0.421)	(0.421)	(0.422)
Observations	105,271	105,271	105,271	105,271	105,271	105,271
Log Likelihood	−52,074.020	−52,070.720	−52,068.650	−52,070.970	−52,061.080	−52,060.120
Akaike Inf. Crit.	104,242.000	104,237.400	104,233.300	104,235.900	104,220.200	104,220.200
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.9 Madison (Wisconsin)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.182***	0.182***	0.182***	0.181***	0.182***	0.182***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Night	−0.145***	−0.150***	−0.150***	−0.151***	−0.152***	−0.156***
	(0.029)	(0.029)	(0.029)	(0.029)	(0.030)	(0.030)
Precip.	0.258***	0.191***	0.262***		4.717***	4.140***
	(0.036)	(0.043)	(0.037)		(1.105)	(1.134)
Night × Precip.		0.203**				0.143*
		(0.079)				(0.079)
Temp.			−0.002***	−0.002**	−0.002**	−0.002**
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.015***	−0.013***
					(0.004)	(0.004)
Constant	0.584***	0.586***	1.232***	1.148***	1.206***	1.223***
	(0.048)	(0.048)	(0.255)	(0.255)	(0.255)	(0.255)
Observations	189,195	189,195	189,195	189,195	189,195	189,195
Log Likelihood	−113,225.300	−113,221.900	−113,222.000	−113,251.200	−113,214.100	−113,212.400
Akaike Inf. Crit.	226,550.700	226,545.900	226,545.900	226,602.400	226,532.100	226,530.700
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.10 New Orleans (Louisiana)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	−0.173***	−0.173***	−0.173***	−0.173***	−0.173***	−0.173***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Night	−0.298***	−0.301***	−0.290***	−0.290***	−0.290***	−0.295***
	(0.021)	(0.021)	(0.022)	(0.022)	(0.022)	(0.022)
Precip.	−0.044***	−0.073***	−0.045***		−2.571***	−5.616***
	(0.014)	(0.017)	(0.014)		(0.955)	(1.135)
Night × Precip.		0.104***				0.195***
		(0.031)				(0.037)
Temp.			0.005***	0.005***	0.005***	0.005***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.008***	0.018***
					(0.003)	(0.004)
Constant	−1.552***	−1.551***	−3.074***	−3.063***	−3.080***	−3.011***
	(0.031)	(0.031)	(0.284)	(0.284)	(0.284)	(0.284)
Observations	418,011	418,011	418,011	418,011	418,011	418,011
Log Likelihood	−248,317.400	−248,311.900	−248,302.800	−248,308.000	−248,299.200	−248,285.700
Akaike Inf. Crit.	496,736.700	496,727.700	496,709.600	496,718.000	496,704.500	496,679.400
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.11 Oakland (California)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	−0.336***	−0.336***	−0.336***	−0.337***	−0.337***	−0.336***
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Night	−0.182***	−0.188***	−0.183***	−0.183***	−0.183***	−0.188***
	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)
Precip.	−0.454***	−0.838***	−0.454***		26.245***	15.141
	(0.095)	(0.156)	(0.096)		(9.598)	(10.953)
Night × Precip.		0.641***				0.504**
		(0.196)				(0.219)
Temp.			−0.0002	0.0002	−0.0002	−0.001
			(0.002)	(0.002)	(0.002)	(0.002)
Precip. × Temp.					−0.094***	−0.056
					(0.034)	(0.038)
Constant	0.119**	0.121**	0.189	0.070	0.167	0.304
	(0.054)	(0.054)	(0.544)	(0.543)	(0.544)	(0.547)
Observations	116,323	116,323	116,323	116,323	116,323	116,323
Log Likelihood	−75,323.240	−75,317.770	−75,323.230	−75,335.340	−75,319.350	−75,316.630
Akaike Inf. Crit.	150,742.500	150,733.500	150,744.500	150,766.700	150,738.700	150,735.300
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.12 Raleigh (North Carolina)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.019**	0.019**	0.019**	0.018**	0.019**	0.019**
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Night	−0.319***	−0.322***	−0.320***	−0.318***	−0.319***	−0.323***
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)
Precip.	−0.154***	−0.200***	−0.153***		−2.000**	−2.397***
	(0.024)	(0.032)	(0.024)		(0.892)	(0.906)
Night × Precip.		0.106**				0.125***
		(0.048)				(0.048)
Temp.			−0.001	−0.001	−0.001	−0.001
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.006**	0.007**
					(0.003)	(0.003)
Constant	−0.140***	−0.139***	0.023	0.052	0.033	0.066
	(0.035)	(0.035)	(0.227)	(0.227)	(0.227)	(0.227)
Observations	317,899	317,899	317,899	317,899	317,899	317,899
Log Likelihood	−210,837.700	−210,835.300	−210,837.400	−210,859.200	−210,835.300	−210,831.900
Akaike Inf. Crit.	421,771.400	421,768.500	421,772.900	421,814.400	421,770.500	421,765.800
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.13 Saint Paul (Minnesota)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.447***	0.448***	0.448***	0.448***	0.448***	0.448***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Night	−0.271***	−0.270***	−0.281***	−0.281***	−0.281***	−0.280***
	(0.033)	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)
Precip.	−0.002	0.016	0.003		−0.267	−0.178
	(0.041)	(0.058)	(0.041)		(1.563)	(1.584)
Night × Precip.		−0.037				−0.031
		(0.083)				(0.084)
Temp.			−0.003***	−0.003***	−0.003***	−0.003***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.001	0.001
					(0.005)	(0.005)
Constant	−1.326***	−1.327***	−0.417	−0.417	−0.417	−0.419
	(0.049)	(0.049)	(0.322)	(0.321)	(0.322)	(0.322)
Observations	128,623	128,623	128,623	128,623	128,623	128,623
Log Likelihood	−72,743.490	−72,743.390	−72,739.390	−72,739.390	−72,739.370	−72,739.310
Akaike Inf. Crit.	145,585.000	145,586.800	145,578.800	145,576.800	145,580.700	145,582.600
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.14 San Francisco (California)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	−0.458***	−0.458***	−0.458***	−0.458***	−0.458***	−0.458***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Night	−0.106***	−0.107***	−0.104***	−0.104***	−0.104***	−0.105***
	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
Precip.	−0.139***	−0.173***	−0.139***		−6.161	−7.084
	(0.050)	(0.066)	(0.050)		(7.442)	(7.501)
Night × Precip.		0.075				0.083
		(0.099)				(0.100)
Temp.			0.004	0.004	0.003	0.003
			(0.003)	(0.003)	(0.003)	(0.003)
Precip. × Temp.					0.021	0.024
					(0.026)	(0.026)
Constant	0.690***	0.690***	−0.360	−0.387	−0.293	−0.239
	(0.031)	(0.031)	(0.913)	(0.913)	(0.917)	(0.919)
Observations	314,682	314,682	314,682	314,682	314,682	314,682
Log Likelihood	−198,686.400	−198,686.100	−198,685.700	−198,689.600	−198,685.400	−198,685.100
Akaike Inf. Crit.	397,470.800	397,472.200	397,471.500	397,477.200	397,472.800	397,474.100
Note:						*p<0.1; **p<0.05; ***p<0.01

6.1.15 Winston-Salem (North Carolina)

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.120***	0.120***	0.120***	0.120***	0.120***	0.120***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Night	−0.380***	−0.376***	−0.384***	−0.381***	−0.382***	−0.379***
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Precip.	−0.107***	−0.049	−0.105***		−2.606**	−2.270*
	(0.031)	(0.046)	(0.031)		(1.195)	(1.231)
Night × *Precip.*		−0.111*				−0.086
		(0.063)				(0.064)
Temp.			−0.002*	−0.002*	−0.002*	−0.002*
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × *Temp.*					0.009**	0.008*
					(0.004)	(0.004)
Constant	0.683***	0.680***	1.224***	1.255***	1.245***	1.225***
	(0.044)	(0.044)	(0.330)	(0.330)	(0.330)	(0.331)
Observations	168,963	168,963	168,963	168,963	168,963	168,963
Log Likelihood	−108,086.000	−108,084.400	−108,084.600	−108,090.200	−108,082.400	−108,081.500
Akaike Inf. Crit.	216,268.000	216,266.800	216,267.200	216,276.400	216,264.800	216,265.000
Note:						*p<0.1; **p<0.05; ***p<0.01

6.2 State Police Departments

6.2.1 Connecticut

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.065***	0.065***	0.065***	0.065***	0.065***	0.065***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Night	−0.391***	−0.392***	−0.388***	−0.388***	−0.388***	−0.389***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Precip.	−0.081***	−0.085***	−0.086***		−0.968**	−1.212**
	(0.014)	(0.019)	(0.014)		(0.471)	(0.524)
Night × Precip.		0.009				0.033
		(0.029)				(0.032)
Temp.			0.002***	0.002***	0.002***	0.002***
			(0.0005)	(0.0005)	(0.0005)	(0.0005)
Precip. × Temp.					0.003*	0.004**
					(0.002)	(0.002)
Constant	0.039**	0.039**	−0.627***	−0.573***	−0.635***	−0.630***
	(0.017)	(0.017)	(0.138)	(0.137)	(0.138)	(0.138)
Observations	1,081,642	1,081,642	1,081,642	1,081,642	1,081,642	1,081,642
Log Likelihood	−731,625.400	−731,625.300	−731,613.500	−731,631.900	−731,611.700	−731,611.200
Akaike Inf. Crit.	1,463,343.000	1,463,345.000	1,463,321.000	1,463,356.000	1,463,319.000	1,463,320.000
Note:						*p<0.1; **p<0.05; ***p<0.01

6.2.2 Michigan

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	−0.086***	−0.086***	−0.091***	−0.091***	−0.091***	−0.091***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Night	−0.175***	−0.174***	−0.164***	−0.164***	−0.164***	−0.162***
	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
Precip.	0.106***	0.118***	0.094***		2.571***	3.046***
	(0.030)	(0.036)	(0.030)		(0.896)	(0.943)
Night × Precip.		−0.047				−0.120*
		(0.068)				(0.069)
Temp.			0.007***	0.007***	0.007***	0.007***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					−0.008***	−0.010***
					(0.003)	(0.003)
Constant	1.194***	1.194***	−0.689***	−0.723***	−0.713***	−0.729***
	(0.048)	(0.048)	(0.231)	(0.231)	(0.231)	(0.232)
Observations	305,899	305,899	305,899	305,899	305,899	305,899
Log Likelihood	−168,488.900	−168,488.700	−168,454.200	−168,459.400	−168,450.400	−168,448.900
Akaike Inf. Crit.	337,075.800	337,077.300	337,008.500	337,016.700	337,002.700	337,001.700
Note:						*p<0.1; **p<0.05; ***p<0.01

6.2.3 New Hampshire

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.203***	0.203***	0.195***	0.193***	0.195***	0.195***
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)
Night	−0.346***	−0.346***	−0.328***	−0.323***	−0.328***	−0.332***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Precip.	−0.379***	−0.380***	−0.408***		−14.933***	−15.694***
	(0.051)	(0.055)	(0.052)		(1.856)	(1.922)
Night × Precip.		0.011				0.252
		(0.155)				(0.158)
Temp.			0.017***	0.017***	0.017***	0.017***
			(0.001)	(0.001)	(0.001)	(0.001)
Precip. × Temp.					0.050***	0.053***
					(0.006)	(0.007)
Constant	−1.532***	−1.532***	−6.311***	−6.197***	−6.320***	−6.299***
	(0.058)	(0.058)	(0.348)	(0.347)	(0.348)	(0.348)
Observations	154,494	154,494	154,494	154,494	154,494	154,494
Log Likelihood	−94,577.940	−94,577.940	−94,480.560	−94,517.080	−94,448.030	−94,446.810
Akaike Inf. Crit.	189,245.900	189,247.900	189,053.100	189,124.200	188,990.100	188,989.600
Note:						*p<0.1; **p<0.05; ***p<0.01

6.2.4 Texas

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.445***	0.445***	0.446***	0.446***	0.446***	0.446***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Night	−0.378***	−0.379***	−0.379***	−0.380***	−0.379***	−0.378***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Precip.	0.377***	0.347***	0.377***		14.524***	15.411***
	(0.005)	(0.006)	(0.005)		(0.286)	(0.308)
Night × Precip.		0.141***				−0.118***
		(0.014)				(0.015)
Temp.			−0.001***	−0.001***	−0.0004***	−0.0004***
			(0.0001)	(0.0001)	(0.0001)	(0.0001)
Precip. × Temp.					−0.047***	−0.050***
					(0.001)	(0.001)
Constant	−0.402***	−0.402***	−0.244***	−0.207***	−0.283***	−0.293***
	(0.005)	(0.005)	(0.034)	(0.034)	(0.034)	(0.034)
Observations	13,629,162	13,629,162	13,629,162	13,629,162	13,629,162	13,629,162
Log Likelihood	−8,742,844.000	−8,742,788.000	−8,742,833.000	−8,745,547.000	−8,741,476.000	−8,741,443.000
Akaike Inf. Crit.	17,485,788.000	17,485,678.000	17,485,768.000	17,491,193.000	17,483,055.000	17,482,992.000
Note:						*p<0.1; **p<0.05; ***p<0.01

6.2.5 Wisconsin

	Dependent variable: Citation					
	(1)	(2)	(3)	(4)	(5)	(6)
Nonwhite	0.689***	0.689***	0.689***	0.689***	0.689***	0.689***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Night	−0.617***	−0.618***	−0.614***	−0.614***	−0.615***	−0.615***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Precip.	0.005	−0.014	0.004		2.281***	2.115***
	(0.019)	(0.021)	(0.019)		(0.653)	(0.663)
Night × *Precip.*		0.093**				0.065
		(0.047)				(0.047)
Temp.			0.001***	0.001***	0.001***	0.001***
			(0.0004)	(0.0004)	(0.0004)	(0.0004)
Precip. × *Temp.*					−0.008***	−0.007***
					(0.002)	(0.002)
Constant	−0.165***	−0.165***	−0.543***	−0.543***	−0.555***	−0.551***
	(0.021)	(0.021)	(0.114)	(0.114)	(0.114)	(0.114)
Observations	829,437	829,437	829,437	829,437	829,437	829,437
Log Likelihood	−557,215.800	−557,213.900	−557,210.100	−557,210.200	−557,204.000	−557,203.100
Akaike Inf. Crit.	1,114,530.000	1,114,528.000	1,114,520.000	1,114,518.000	1,114,510.000	1,114,510.000
Note:						*p<0.1; **p<0.05; ***p<0.01

7 Marginal Effects

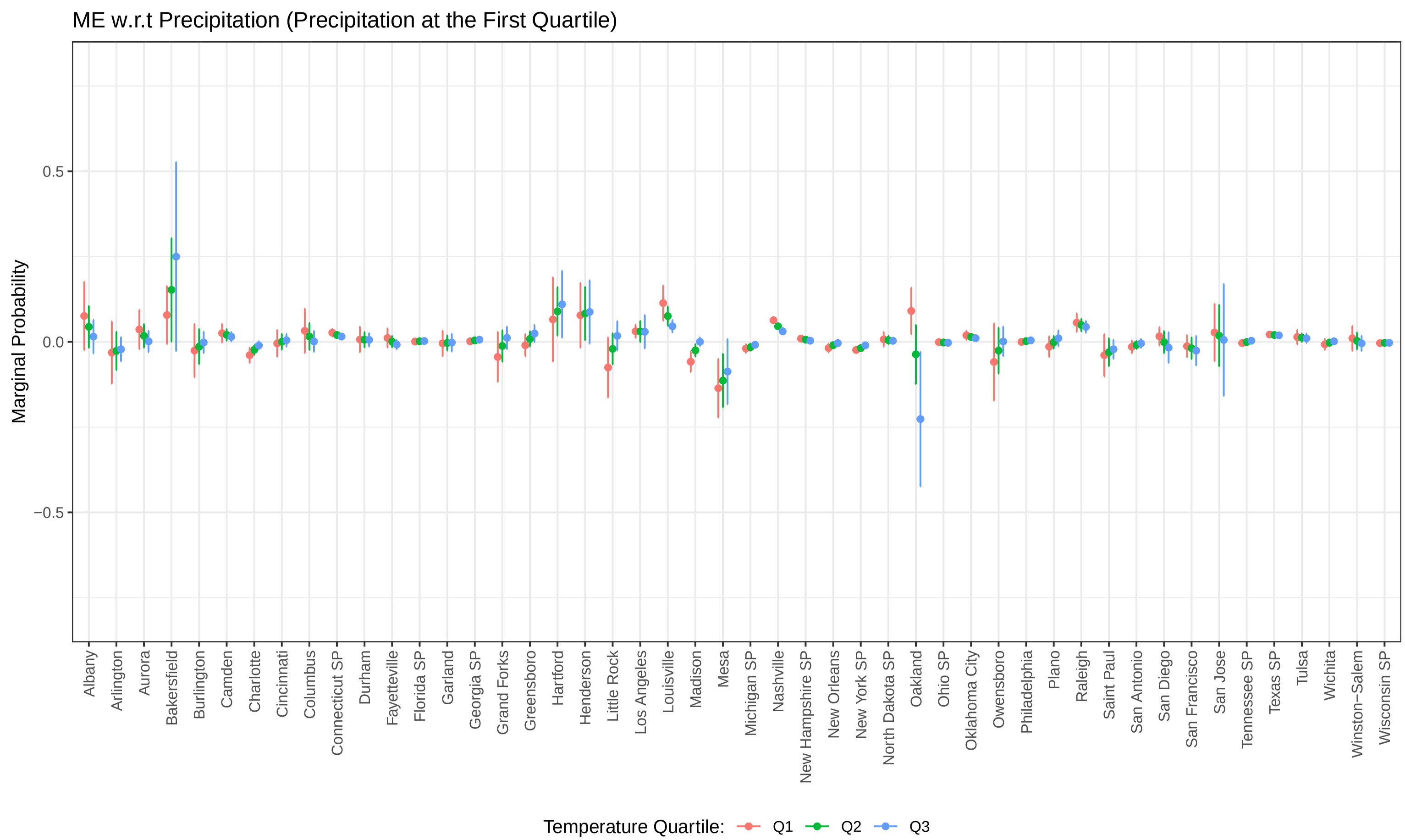

Figure 3. Marginal effects of a stopped driver being black with respect to precipitation being at the first quartile.

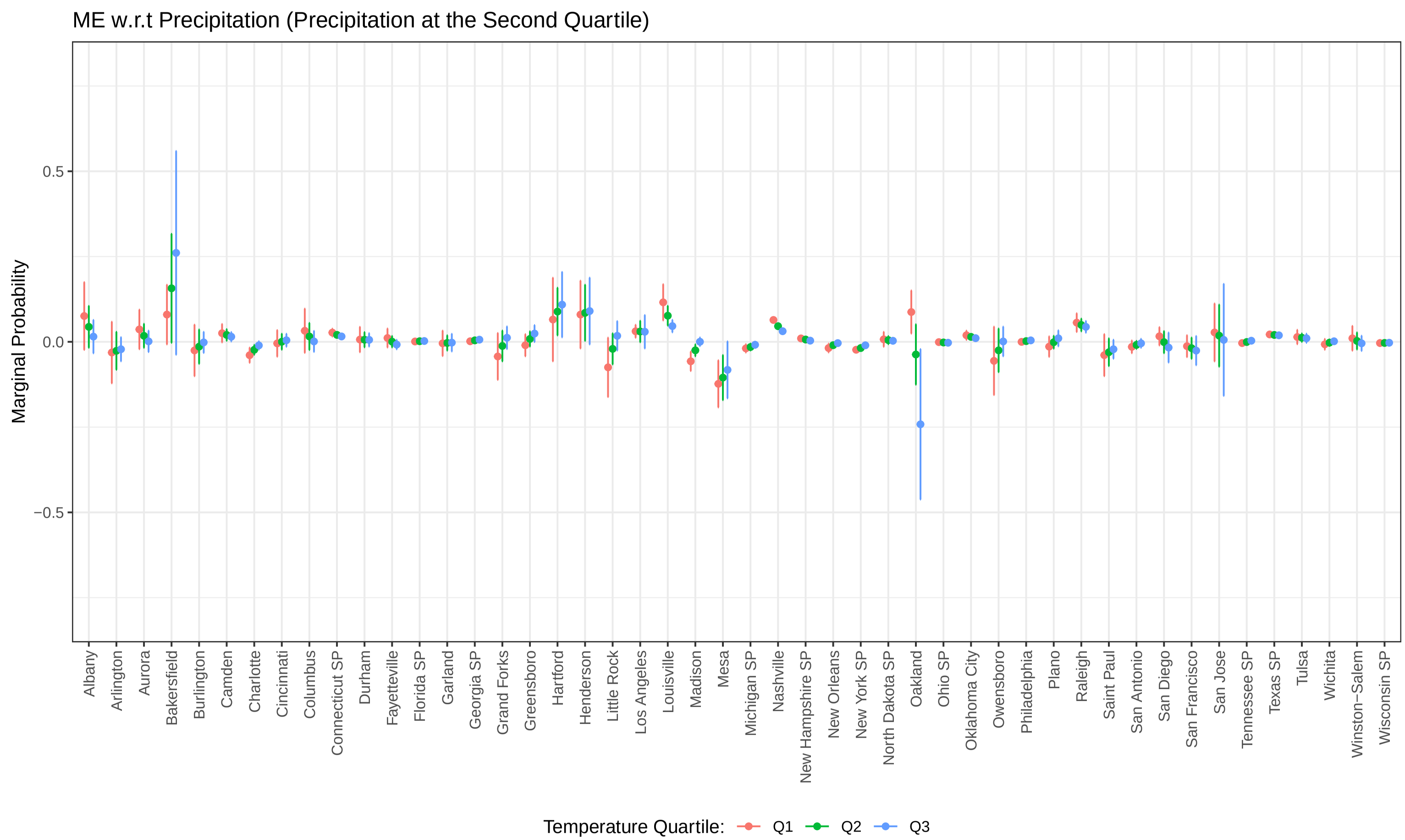

Figure 4. Marginal effects of a stopped driver being black with respect to precipitation being at the second quartile.

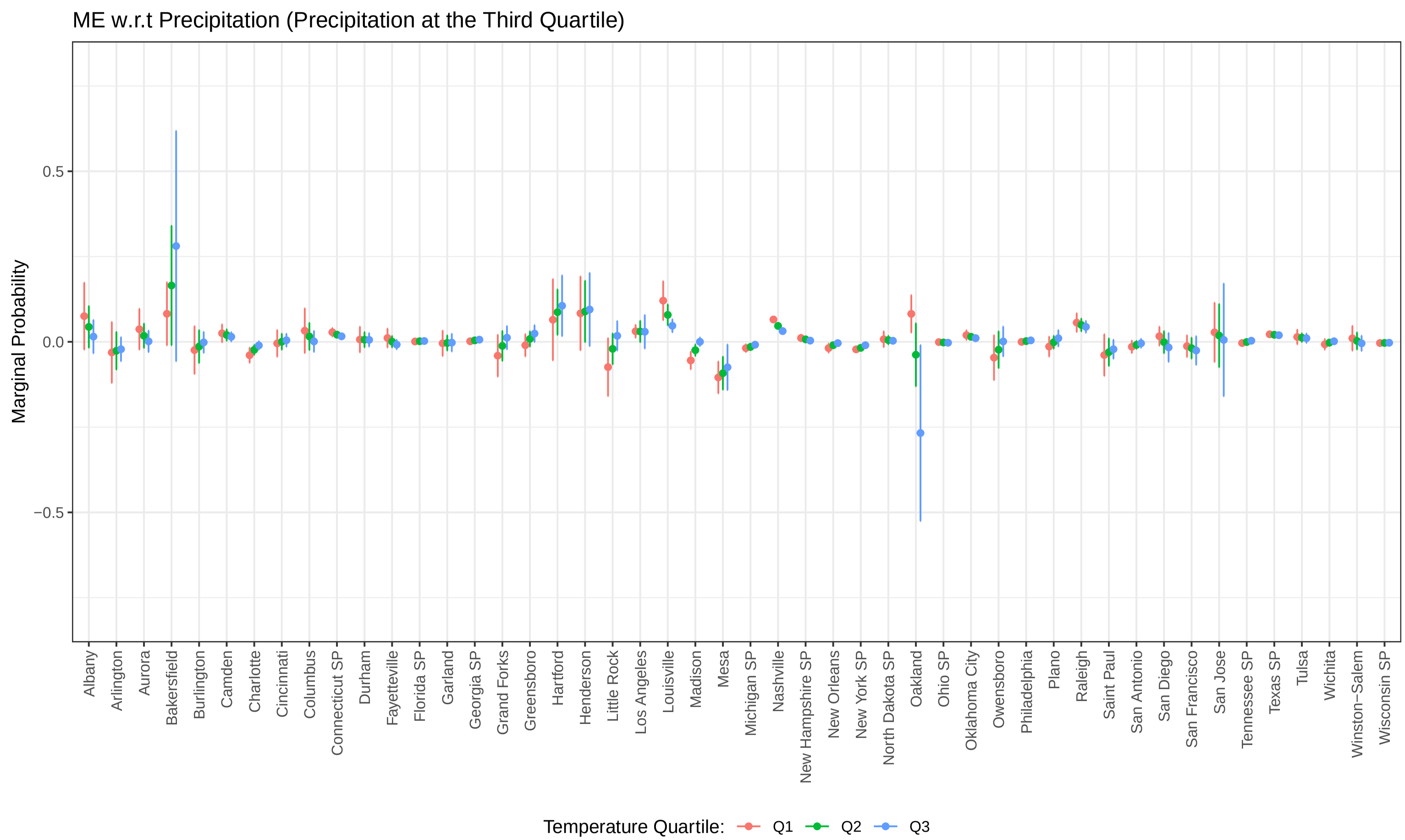

Figure 5. Marginal effects of a stopped driver being black with respect to precipitation being at the third quartile.

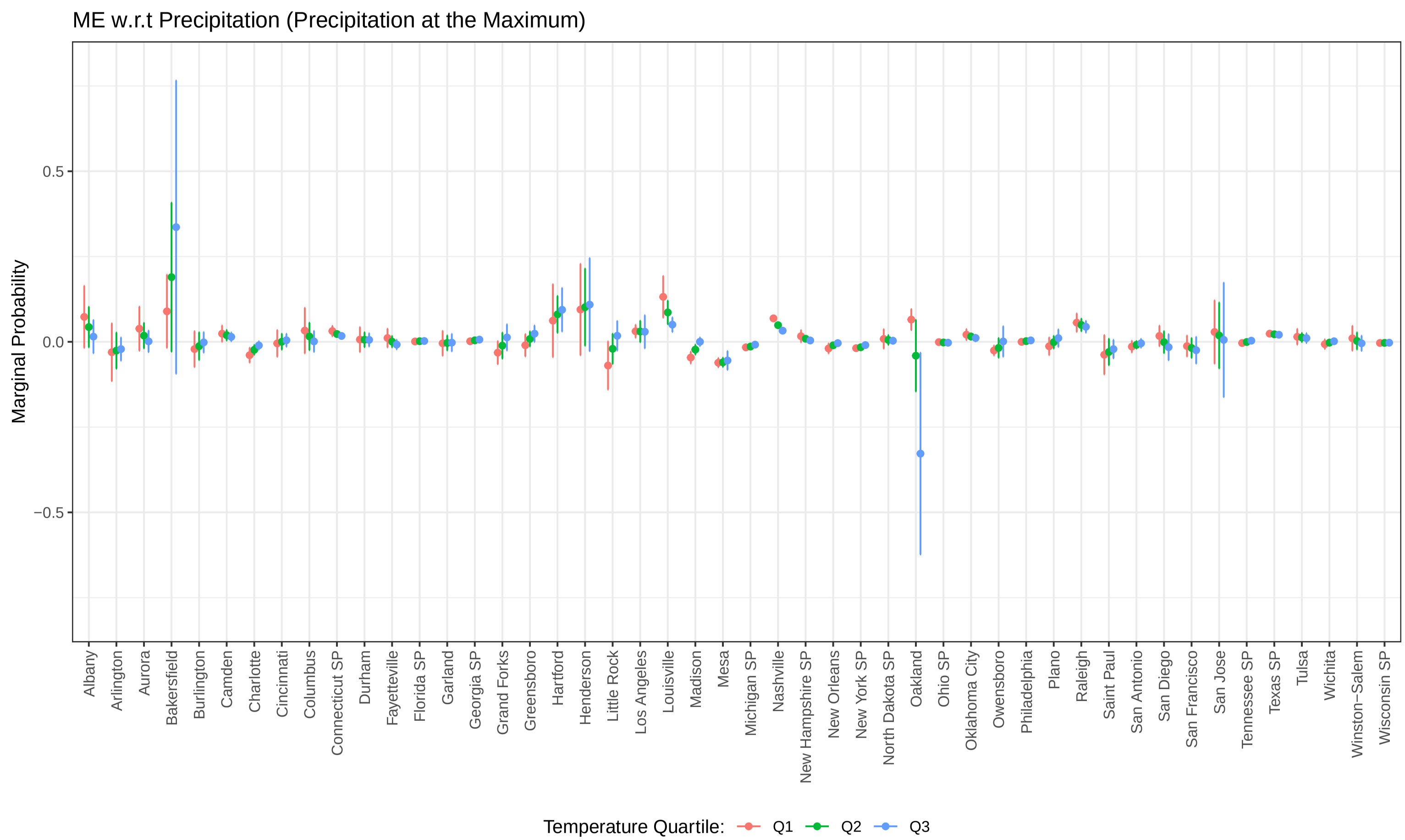

Figure 6. Marginal effects of a stopped driver being black with respect to precipitation being at the maximum.

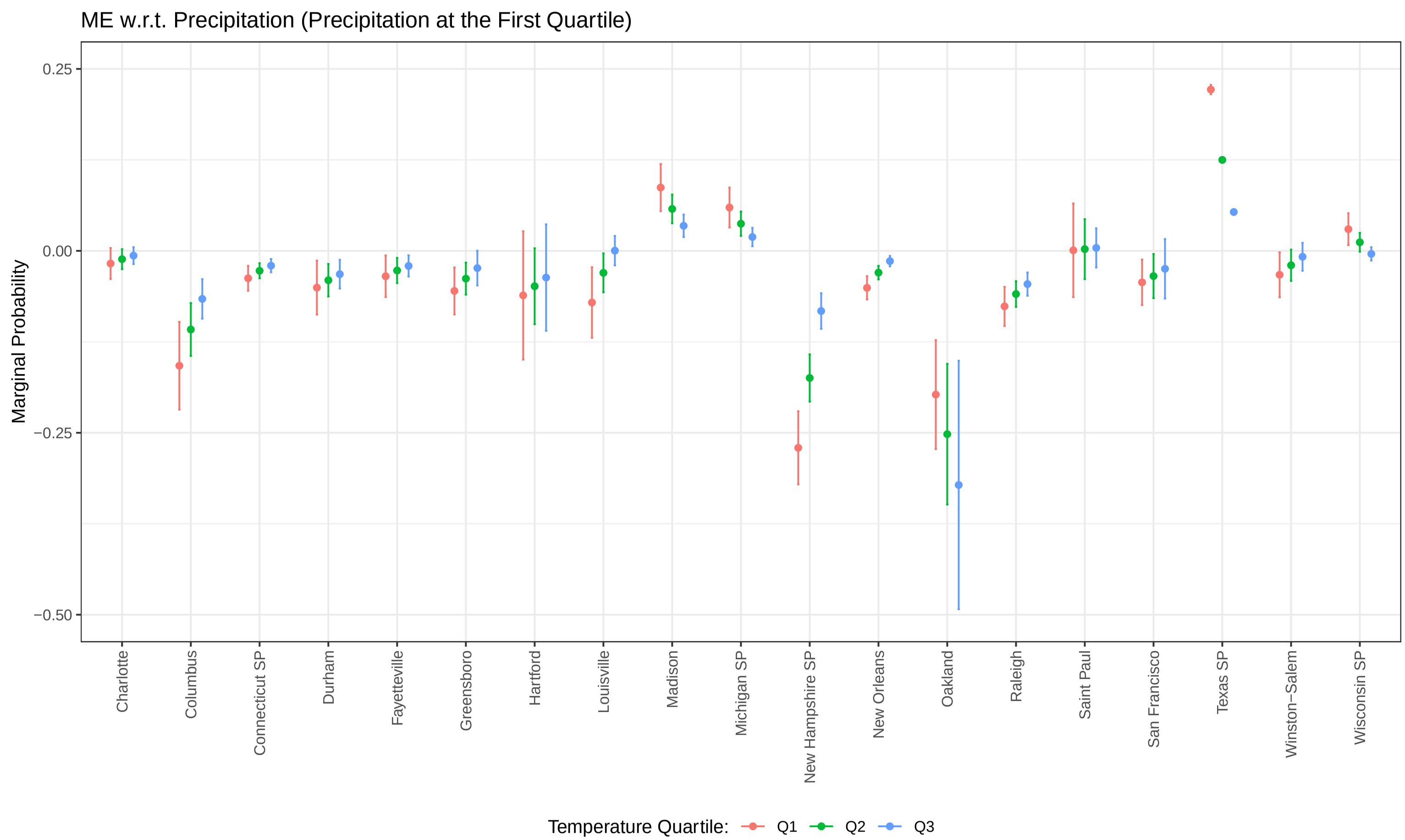

Figure 7. Marginal effects of a citation issuance with respect to precipitation being at the first quartile.

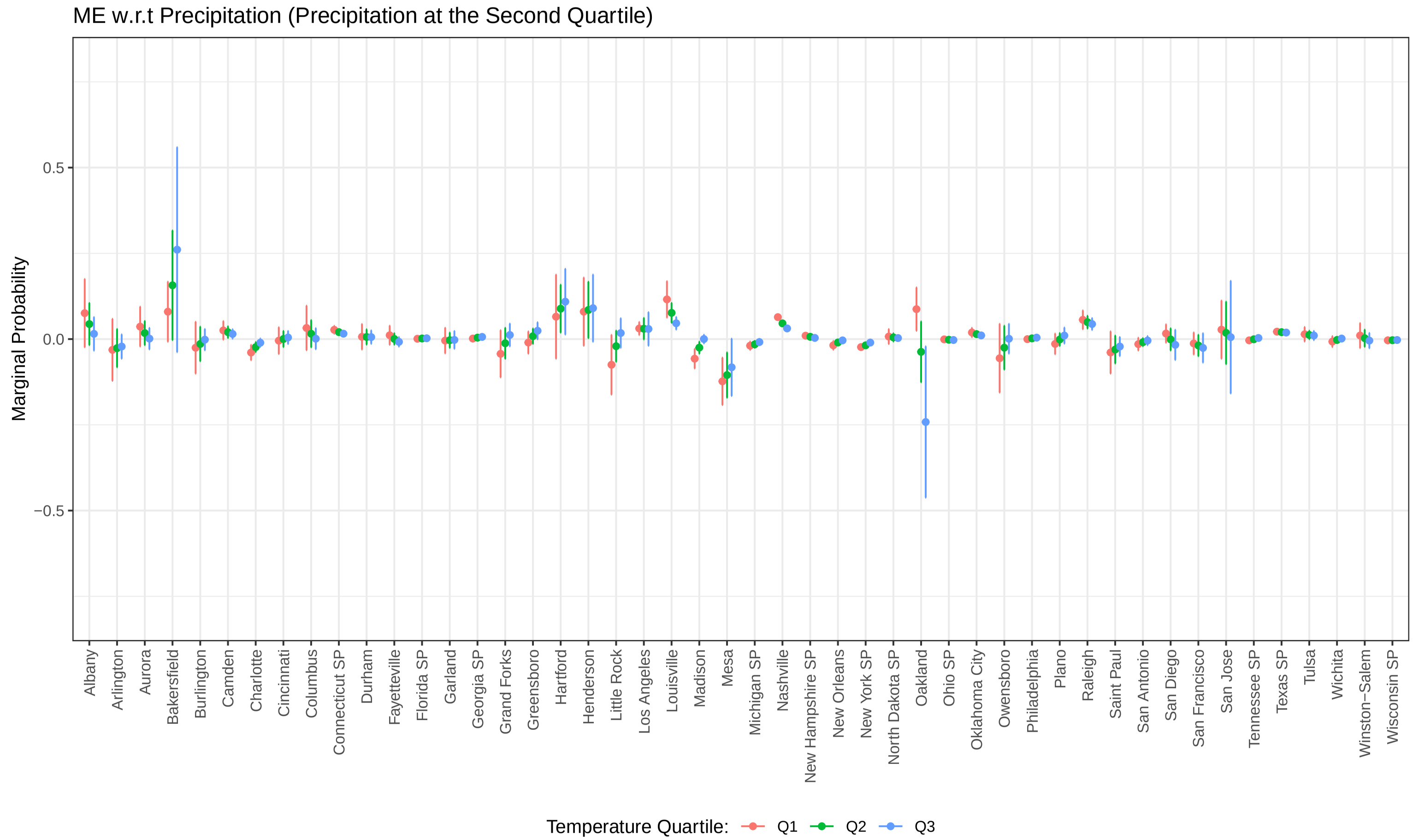

Figure 8. Marginal effects of a citation issuance with respect to precipitation being at the second quartile.

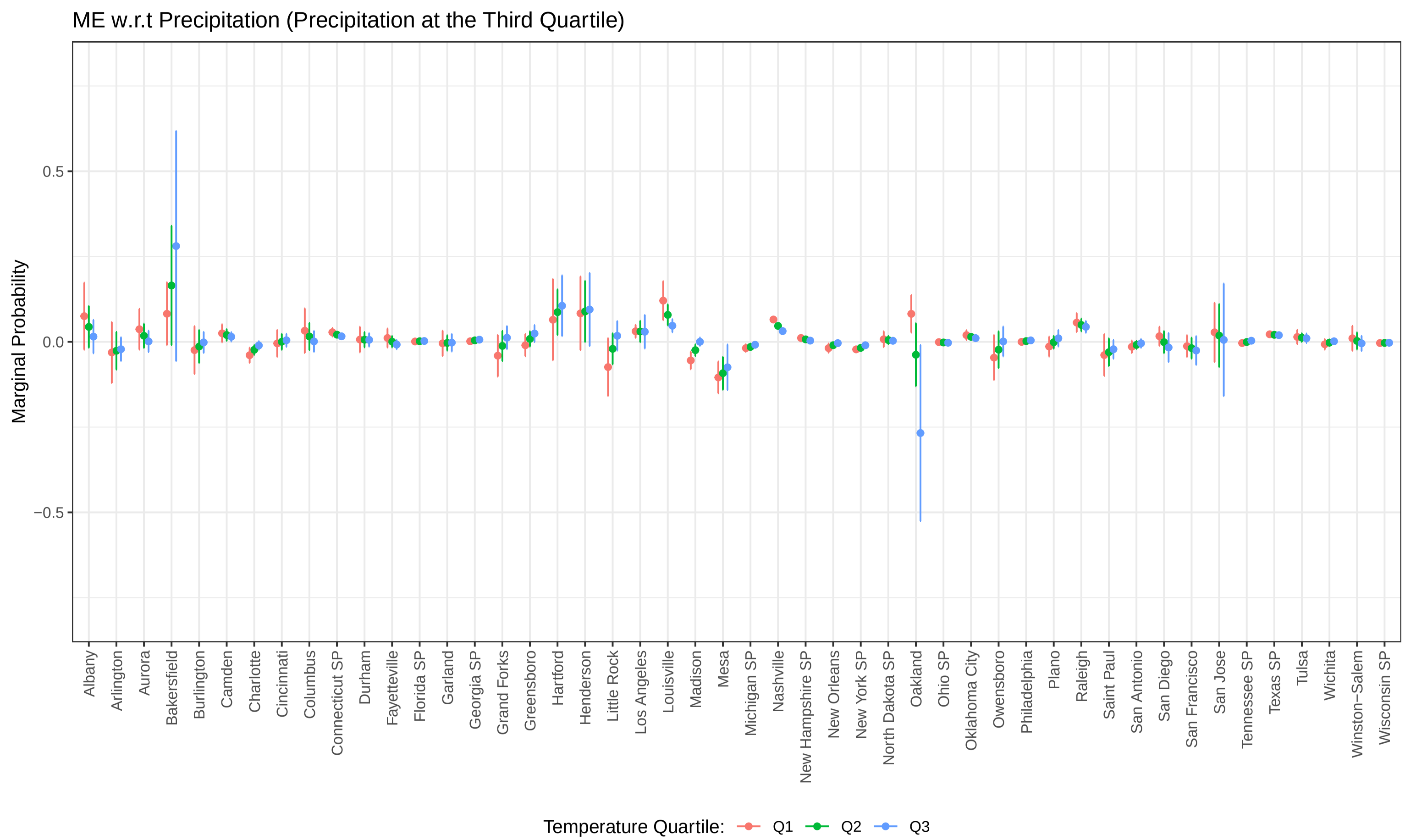

Figure 9. Marginal effects of a citation issuance with respect to precipitation being at the third quartile.

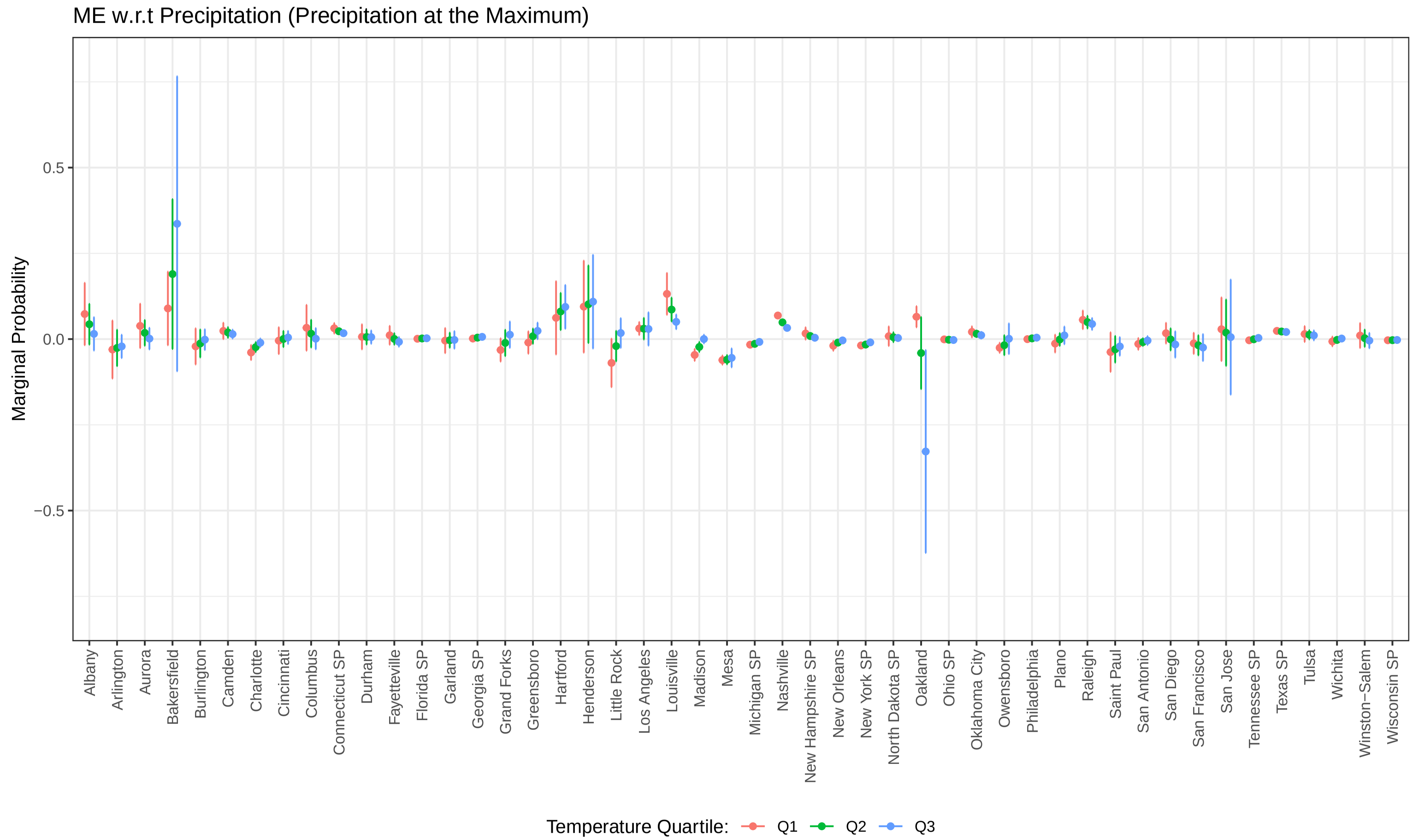

Figure 10. Marginal effects of a citation issuance with respect to precipitation being at maximum.

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