

Online Appendix for “How Do NYPD Officers Respond to Terror Threats?”

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Abstract

This is the online appendix for Lehrer and Lepage (2019) which presents additional results and robustness checks that are discussed in the main text.

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1 Additional Results and Robustness Checks

1.1 Estimates by Number of Mosques per Precinct

Table A2: Estimates of the Impact of the NYC Alert on the Probability of Frisk by Number of Mosques in Precinct

	Frisk
# Mosques	-1.206 (0.837)
# Mos X Other	-0.969 (0.202)
Other	5.597 (0.842)
Alert Increase	3.387 (1.008)
Alert Inc X #Mos	-0.149 (0.242)
Alert Inc X Other	-1.505 (2.040)
Alert Inc X Other X # Mos	1.165 (0.513)
Alert Decrease	-1.070 (1.364)
Alert Dec X # Mos	-0.107 (0.328)
Alert Dec X Other	0.301 (1.956)
Alert Dec X Other X # Mos	-0.633 (0.488)
N. Observations	415,408
Time and Precinct FE	Y

Robust standard errors in parentheses. The binary outcome variable is rescaled to 100 or 0. To Equation (1) from the main text, we added the number of mosques in each precinct and interacted it with Other, indicator variables for the alert increase and decrease as well as their interactions with Other. Additional covariates include a linear trend, an interaction between the trend and the treatment group, fixed effects for month, year, day of week, precinct and year X precinct.

1.2 Estimates by Time of Day

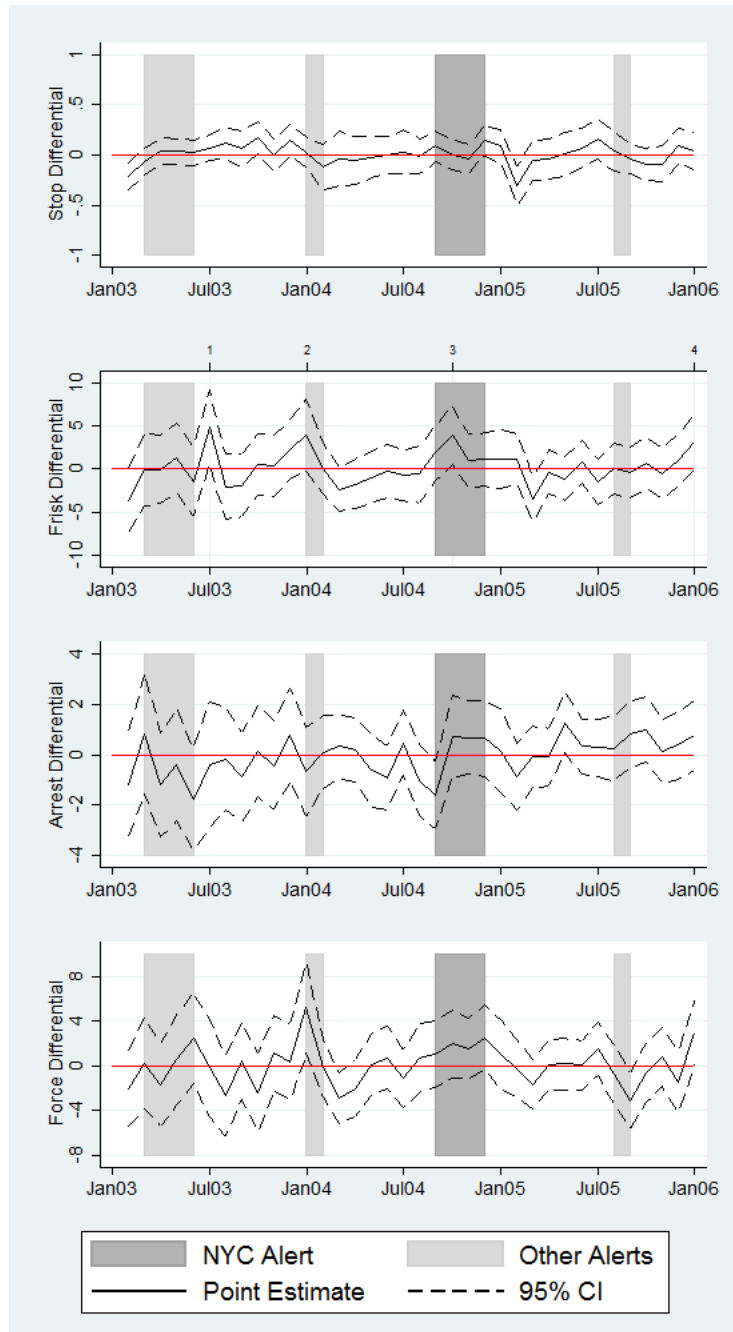
Table A1: Estimates of the Impact of the NYC Alert on the Probability of Frisk by Time of Day

Time of Day	Estimate
2-4	9.88 (3.181)
5-7	5.727 (6.226)
8-10	3.751 (3.497)
11-13	0.612 (2.650)
14-16	1.395 (2.497)
17-19	4.235 (2.130)
20-22	1.979 (1.797)
23-1	4.997 (1.941)
Time and Precinct FE	Y

Robust standard errors in parentheses. The binary outcome variable is rescaled to 100 or 0. Additional covariates include a linear trend, an interaction between the trend and the treatment group, fixed effects for month, year, day of week, precinct and year X precinct.

1.3 Placebo Test at the Monthly Level

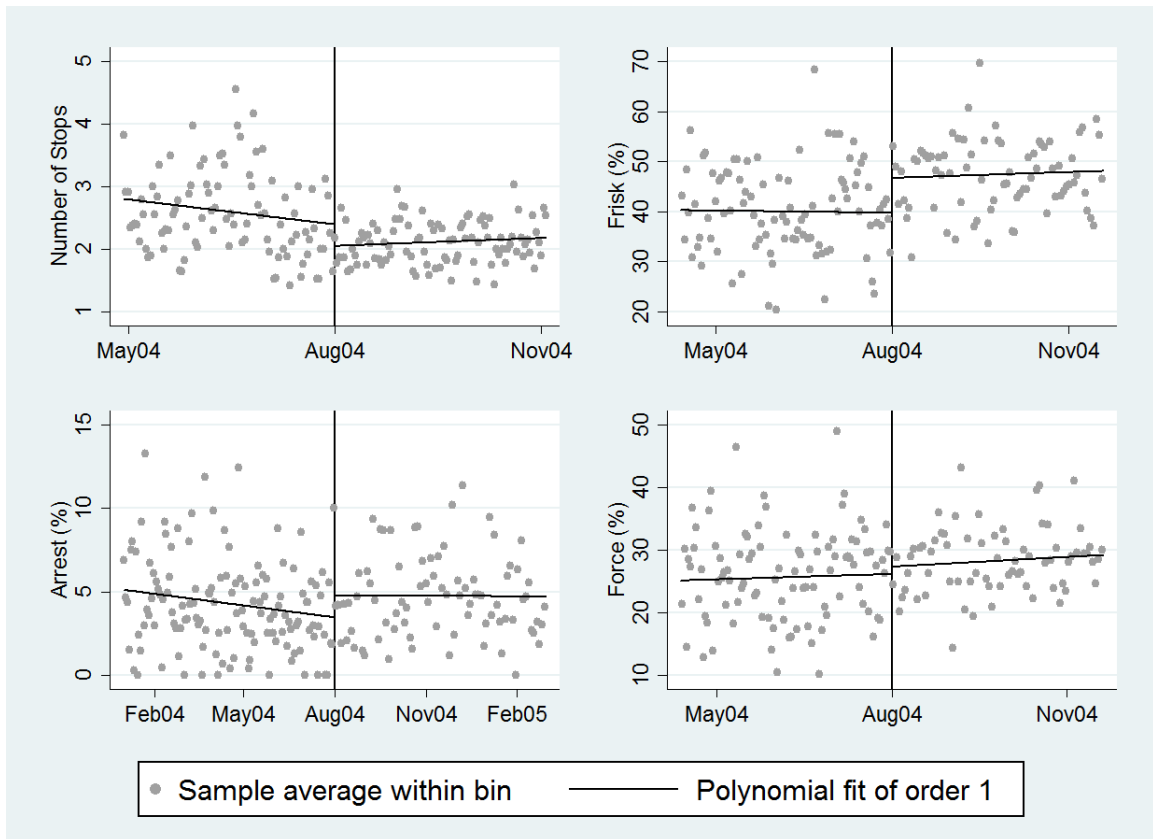
Figure A3: Monthly Estimates of the Impact of Changes in the HSAS Alert Level on Policing Outcomes



Numbers above panels denote statistical significance at the 5% level.

1.4 Regression Discontinuity Plots and Estimates

Figure A4: Regression Discontinuity Local Polynomial Plots: Impact of the NYC-Specific HSAS Alert Increase on Policing Outcomes for the Racial Group “Other”



Number of bins selected using mimicking variance evenly-spaced method. Bandwidth selection based on minimizing the MSE.

Table A4: Regression Discontinuity Local Polynomial Estimates: Impact of the NYC-Specific HSAS Alert Increase on Policing Outcomes

	Comparison Group				Others			
	Daily of Stops	Frisk	Arrest	Force	Daily of Stops	Frisk	Arrest	Force
Conventional	-0.037 (0.133)	1.214 (1.509)	0.741 (0.536)	1.187 (1.117)	-0.172 (0.108)	6.179 (2.468)	0.645 (0.655)	0.363 (2.193)
Robust	0.017 (0.148)	0.539 (1.692)	0.65 (0.645)	0.767 (1.234)	-0.143 (0.127)	5.766 (2.913)	0.42 (0.754)	-0.292 (2.525)
Observations	341,062	341,062	341,062	341,062	74,346	74,346	74,346	74,346

Standard errors in parentheses for the first two rows, robust standard errors as proposed in Calonico et al. (2014) in parentheses for the third row. The binary outcome variables are rescaled to take the value 100 or 0. Estimated using bandwidth selection based on minimizing the MSE and triangular kernels.

1.5 Analysis at the Hourly Level

Table A5: Impact of the NYC Alert Change on Policing Outcomes at the Hourly Level

	Stop	Frisk	Arrest	Force
Other	-0.212 (0.006)	-0.007 (0.340)	-1.816 (0.162)	-0.971 (0.312)
Alert Increase	-0.120 (0.009)	3.062 (0.402)	0.384 (0.212)	0.930 (0.363)
Alert IncXOther	0.026 (0.014)	3.635 (0.835)	0.615 (0.383)	2.766 (0.764)
Alert Decrease	0.014 (0.012)	-1.096 (0.558)	0.375 (0.293)	-0.264 (0.507)
Alert DecXOther	-0.060 (0.014)	-2.554 (0.826)	0.182 (0.375)	-1.736 (0.749)
N. Observations	1,118,702	1,118,702	1,118,702	1,118,702
Time and Precinct FE	Y	Y	Y	Y

Robust standard errors in parentheses. The binary outcome variables are rescaled to 100 or 0. Additional covariates include a linear trend, an interaction between the trend and the treatment group, fixed effects for hour of day, month, year, day of week, precinct and year X precinct.

1.6 Estimates Conditional on the Number of Stops per Precinct

Table A6: Impact of the NYC Alert Change on Policing Outcomes Conditional on the Number of Stops

	Frisk	Arrest	Force
Other	4.421 (0.383)	-0.690 (0.184)	2.442 (0.345)
Alert Increase	2.779 (0.435)	0.294 (0.222)	0.695 (0.375)
Alert IncXOther	1.629 (0.897)	0.003 (0.399)	1.263 (0.782)
Alert Decrease	-0.899 (0.610)	0.109 (0.305)	0.300 (0.529)
Alert DecXOther	-2.253 (0.883)	0.224 (0.387)	-1.292 (0.759)
N. Observations	415,408	415,408	415,408
Outcome Mean	23.147	3.751	12.245
Time and Precinct FE	Y	Y	Y

Robust standard errors in parentheses. The outcome variables represent the number of stops in each precinct involving frisks, arrests or force used (all rescaled to 100 or 0) over the total number of daily stops in that precinct. Additional covariates include a linear trend, an interaction between the trend and the treatment group, fixed effects for hour of day, month, year, day of week, precinct and year X precinct.

1.7 African-Americans as the Comparison Group

Table A7: Impact of the NYC Alert Change on the Number of Stops and Frisks using African-Americans as the Comparison Group

Number of Stops				
Other	-3.038*** (0.064)	-3.639*** (0.068)	-0.138*** (0.041)	-0.138*** (0.043)
Alert5 Increase	-0.723*** (0.121)	-2.061*** (0.119)	-0.242*** (0.092)	-0.242** (0.098)
Alert5 IncXOther	0.504*** (0.128)	0.916*** (0.150)	0.151* (0.089)	0.151 (0.093)
Alert5 Decrease	2.449*** (0.125)	1.761*** (0.132)	0.268*** (0.104)	0.268** (0.105)
Alert5 DecXOther	-2.062*** (0.130)	-2.329*** (0.158)	-0.225** (0.093)	-0.225** (0.097)
N. Observations	260,672	260,672	260,620	260,620
P-value H0: I5=D5	0.0000	0.0000	0.0252	0.0321
P-value H0: I5=D5*-1	0.0000	0.0000	0.2907	0.3064
Outcome Mean	8.060	8.060	8.060	8.060
Frisk				
Other	-5.526*** (0.438)	-4.270*** (0.428)	-1.519*** (0.438)	-1.519*** (0.512)
Alert5 Increase	-0.865 (0.548)	2.408*** (0.582)	2.491*** (0.582)	2.491*** (0.638)
Alert5 IncXOther	3.652*** (1.060)	3.717*** (1.014)	3.005*** (1.014)	3.005*** (1.089)
Alert5 Decrease	-3.531*** (0.532)	1.527* (0.788)	0.995 (0.786)	0.995 (0.889)
Alert5 DecXOther	-3.631*** (1.038)	-2.784*** (0.999)	-2.789*** (0.999)	-2.789*** (1.070)
N. Observations	260,672	260,672	260,620	260,620
P-value H0: I5=D5	0.0003	0.0007	0.0025	0.0045
P-value H0: I5=D5*-1	0.973	0.1264	0.7234	0.7613
Outcome Mean	50.404	50.404	50.404	50.404
Time and Precinct FE	N	Y	Y	Y
Dep. Variable Lags	N	N	Y	Y
HAC SE	N	N	N	Y

Robust or HAC standard errors in parentheses. * 0.1, ** 0.05, *** 0.01. The binary outcome variable Frisk is rescaled to 100 or 0. Additional covariates include a linear trend, an interaction between the trend and the treatment group, fixed effects for month, year, day of week, precinct and year X precinct. The p-values refer to tests of the differential impact of the alert increase for Others being equal and equal but of opposite sign to that of the decrease.

Table A7-2: Impact of the NYC Alert Change on the Arrests and Force Used using African-Americans as the Comparison Group

Arrest				
Other	-3.686***	-3.041***	-2.865***	-2.865***
	(0.218)	(0.220)	(0.220)	(0.221)
Alert5 Increase	-1.621***	0.343	0.341	0.341
	(0.293)	(0.316)	(0.316)	(0.311)
Alert5 IncXOther	0.66	0.387	0.348	0.348
	(0.486)	(0.484)	(0.484)	(0.478)
Alert5 Decrease	-1.453***	0.493	0.463	0.463
	(0.277)	(0.419)	(0.419)	(0.413)
Alert5 DecXOther	0.375	0.169	0.159	0.159
	(0.466)	(0.468)	(0.468)	(0.461)
N. Observations	260,672	260,672	260,620	260,620
P-value H0: I5=D5	0.753	0.8093	0.8349	0.8323
P-value H0: I5=D5*-1	0.0003	0.0587	0.0851	0.0865
Outcome Mean	6.803	6.803	6.803	6.803
Force				
Other	-5.015***	-3.882***	-0.814**	-0.814*
	(0.406)	(0.405)	(0.410)	(0.468)
Alert5 Increase	-1.440***	1.636***	1.665***	1.665***
	(0.509)	(0.544)	(0.544)	(0.560)
Alert5 IncXOther	1.031	0.677	0.297	0.297
	(0.960)	(0.938)	(0.937)	(0.968)
Alert5 Decrease	-5.296***	0.291	-0.0543	-0.0543
	(0.487)	(0.736)	(0.735)	(0.749)
Alert5 DecXOther	-0.0581	-0.226	-0.472	-0.472
	(0.929)	(0.913)	(0.912)	(0.928)
N. Observations	260,672	260,672	260,620	260,620
P-value H0: I5=D5	0.5468	0.6097	0.6634	0.6693
P-value H0: I5=D5*-1	0.079	0.4125	0.7499	0.7696
Outcome Mean	25.748	25.748	25.748	25.748
Time and Precinct FE	N	Y	Y	Y
Dep. Variable Lags	N	N	Y	Y
HAC SE	N	N	N	Y

Robust or HAC standard errors in parentheses. * 0.1, ** 0.05, *** 0.01. The binary outcome variables Arrest and Force are rescaled to 100 or 0. Additional covariates include a linear trend, an interaction between the trend and the treatment group, fixed effects for month, year, day of week, precinct and year X precinct. The p-values refer to tests of the differential impact of the alert increase for Others being equal and equal but of opposite sign to that of the decrease.

1.8 Other Alert Changes

This section explores the five other increases and decreases in the HSAS alert level between 2003 and 2005. Unlike the August 1, 2004, alert increase that is the focus of the main text, the remaining alert changes were much more vague, providing little specifics regarding potential threats or locations. Numerous articles and news outlets questioned the credibility and usefulness of these other alert level changes, even speculating that the alert increases seemed aimless and were announced for political reasons. The dates of all alert changes are presented in Table A7. Note that these other alerts were also much shorter in duration, usually lasting for around 2-3 weeks versus more than three months for the NYC-specific alert.

We expanded equation (1) to consider the impact of the five other alerts together (alerts 1-4 and 6 chronologically) on the same four policing outcomes as considered in the main text. The results are presented in Table A7-2. Overall, there is no clear pattern of the direction of the effect of these alert changes on policing behavior, either in general or differentially for Others. For all outcomes except use of force, we cannot reject that these other alert increases jointly had no differential impact on Others. For arrests, the fourth alert increase is associated with a large differential increase for Others, but given evidence in Figures 1 and 2, robustness checks, as well as searches of the news around this time, there is little to support that this was the result of the alert increase rather than simply noise. Similarly, while it is estimated that these alerts jointly had a significant impact on differential use of force on Others, the estimated magnitudes are small and individual coefficients are generally statistically insignificant with no clear direction. These results are consistent with the changes being vague and lacking salience to influence the behavior of police officers.

Table A8: Date and Description of HSAS Alert Level Changes

1 - February 7 2003	Raised Yellow to Orange Reports of Al-Qaeda attacks on apartment buildings, hotels and other soft skin targets.
February 27 2003	Lowered Orange to Yellow (20 days total).
2 - March 17 2003	Raised Yellow to Orange Al-Qaeda attacks to defend Muslims and the Iraqi people.
April 16 2003	Lowered Orange to Yellow (25 days total).
3 - May 20 2003	Raised Yellow to Orange Following international bombings, higher risk of attacks in the US.
May 30 2003	Lowered Orange to Yellow (10 days total).
4 - December 21 2003	Raised Yellow to Orange Increased terrorist communication.
January 9 2004	Lowered Orange to Yellow (19 days total).
5 - August 1 2004	Raised Yellow to Orange Threat to financial services sectors in NYC, NJ, and DC.
November 10 2004	Lowered from Orange to Yellow (98 days total).
6 - July 7 2005	Raised from Yellow to Orange - Threat to mass transit.
August 12 2005	Lowered from Orange to Yellow (36 days total).

Table A8-2: Impact of Other Alert Changes on Policing Outcomes

	Stop	Frisk	Arrest	Force
Other	-1.242 (1.701)	-2.678*** (0.946)	-1.520 (1.531)	-0.181*** (0.061)
Alert1 Increase	1.564 (1.412)	-0.433 (0.888)	4.384*** (1.329)	0.022 (0.074)
Alert2 Increase	1.264 (1.439)	-0.068 (0.903)	2.907** (1.402)	-0.082 (0.080)
Alert3 Increase	-1.045 (1.764)	-0.299 (1.090)	-0.926 (1.730)	-0.157** (0.076)
Alert4 Increase	2.634 (1.644)	-1.064 (0.815)	1.086 (1.574)	0.239*** (0.080)
Alert6 Increase	0.951 (0.698)	-1.056*** (0.343)	0.871 (0.618)	-0.101* (0.058)
Alert1 IncXOther	3.616 (3.127)	1.705 (1.792)	3.660 (2.975)	0.069 (0.094)
Alert2 IncXOther	0.503 (3.215)	-0.202 (1.805)	1.739 (3.090)	0.026 (0.109)
Alert3 IncXOther	0.966 (4.238)	-2.484 (1.838)	0.085 (4.157)	0.063 (0.116)
Alert4 IncXOther	1.111 (2.431)	-0.187 (1.106)	5.528** (2.372)	-0.268** (0.124)
Alert6 IncXOther	-1.821 (1.444)	1.158* (0.665)	-2.739** (1.244)	0.037 (0.089)
Alert1 Decrease	-2.072 (1.607)	-0.561 (1.002)	-1.774 (1.542)	0.161* (0.088)
Alert2 Decrease	-0.650 (1.249)	0.018 (0.777)	1.047 (1.229)	0.025 (0.063)
Alert3 Decrease	-4.371*** (1.600)	-1.274 (0.986)	-1.962 (1.564)	0.205*** (0.069)
Alert4 Decrease	-5.690*** (1.474)	-0.565 (0.787)	-1.734 (1.378)	-0.384*** (0.130)
Alert6 Decrease	-1.260* (0.724)	0.779** (0.353)	-0.515 (0.640)	0.109* (0.057)
Alert1 DecXOther	0.906 (3.586)	-0.630 (2.072)	-2.775 (3.460)	0.051 (0.115)
Alert2 DecXOther	-3.109 (2.837)	-1.106 (1.504)	0.292 (2.776)	0.033 (0.089)
Alert3 DecXOther	1.388 (3.851)	3.479** (1.597)	-1.343 (3.767)	-0.007 (0.102)
Alert4 DecXOther	-1.930 (2.346)	0.620 (1.055)	-4.998** (2.288)	0.171 (0.123)
Alert6 DecXOther	2.548* (1.452)	-0.875 (0.666)	2.882** (1.246)	-0.049 (0.089)
N. Observations	415,341	415,341	415,341	415,341
P-value H0: AI1-AI4, AI6=0	0.336	0.326	0.667	0.033
Outcome Mean	23.013	44.925	6.680	4.316
Time and Precinct FE	Y	Y	Y	Y
Dep. Variable Lags	Y	Y	Y	Y

Standard errors in parentheses. * 0.1, ** 0.05, *** 0.01. The binary outcome variables are rescaled to 100 or 0. Additional covariates include a linear trend, an interaction between the trend and the treatment group, fixed effects for month, year, day of week, precinct and year X precinct.

The p-values refer to a joint test of the differential impact of all alert increases for Others being equal to 0.