

Supplementary Analysis

Descriptive Statistics

The following tables present more detailed summary statistics used in the binomial and panel regression analysis for London, Greater Manchester, and the West Midlands.

Table 4: Ward Level Summary Statistics, Greater London Metropolitan Area

	Mean	St. Dev.	Min	Max
ASB stops per capita	0.03	0.02	0.003	0.36
Population, 000s	13.7	2.6	5.0	28
Median house price, 000s	395	214	129	3,500
Homeowners, %	22.6	10.3	3.4	50.9
Social renters, %	21.3	13.2	0	66.4
Single parent, %	13.3	5.0	3.9	34.3
Level 1 education or below, %	26.2	8.7	6.1	51.8
Unemployed, %	8.8	3.5	3.0	19.8
Black Caribbean, %	8.4	16	0.02	100
Black African, %	5.9	10.4	0.01	100
Indian, %	7.0	9.1	0.3	50.9
Pakistani, %	1.9	4.6	0	100
Bangladeshi, %	3.0	4.2	0	27.1
Muslim, %	12.1	9.7	0.5	55.9

Source: Greater London Authority and Office of National Statistics; calculations by author. ASB: anti-social behaviour

Table 5: Ward Level Summary Statistics, Greater Manchester and West Midlands

	Mean	St. Dev	Min	Max
Stop and search per capita	0.003	0.005	0	0.05
Population, 000s	14.8	5.3	9.0	37.8
Homeowners, %	62.9	16.4	12.2	93.8
Social renters, %	16.7	10.8	0	48.4
Single parent, %	8.8	3.0	0.5	17.3
Level 1 education level or below, %	36.1	9.5	6.5	57.5
Unemployed, %	4.3	2.5	0.5	12.8
Black Caribbean, %	1.4	2.0	0	12.6
Black African, %	2.0	2.9	0.01	20.4
Indian, %	4.2	5.8	0.05	44.4
Pakistani, %	5.6	9.7	0.02	60.7
Bangladeshi, %	1.6	6.7	0	66.0
Muslim, %	9.8	15.1	0.2	84.8

Source: Greater London Authority and Office of National Statistics; calculations by author. ASB: anti-social behaviour

Marginal Effects Tables

Below I present the results of the marginal effects regressions plotted in the main text.

Table 6: Marginal Effect of Black Share on ASB Policing and Turnout (London)

	2012	2014	2016
log ASB stops per capita	0.97** (0.94, 1.00)	0.95*** (0.92, 0.97)	0.97*** (0.95, 0.99)
% Black	1.04*** (1.02, 1.06)	0.97** (0.95, 0.99)	1.01 (0.99, 1.03)
log population	0.96 (0.90, 1.01)	0.93** (0.89, 0.98)	1.00 (0.95, 1.05)
log house price	0.97 (0.92, 1.03)	0.94** (0.90, 0.99)	0.96 (0.92, 1.01)
% homeowners	3.58*** (2.74, 4.69)	1.76*** (1.38, 2.23)	2.65*** (2.12, 3.30)
% social renters	1.36*** (1.15, 1.61)	1.04 (0.89, 1.21)	1.07 (0.93, 1.24)
% single parent family households	0.67* (0.41, 1.08)	0.63** (0.42, 0.95)	0.70* (0.49, 1.01)
% level 1 education level or below	0.31*** (0.24, 0.40)	0.70*** (0.54, 0.90)	0.26*** (0.21, 0.33)
% unemployed	0.97 (0.90, 1.04)	1.09*** (1.03, 1.16)	1.03 (0.98, 1.09)
% Indian	0.97*** (0.95, 0.98)	0.99 (0.98, 1.01)	0.97*** (0.96, 0.98)
% Pakistani	0.97*** (0.95, 0.98)	1.00 (0.98, 1.01)	0.98*** (0.97, 0.99)
% Bangladeshi	0.98** (0.97, 1.00)	1.01** (1.00, 1.02)	0.99 (0.98, 1.00)
% Muslim	1.10*** (1.06, 1.13)	1.00 (0.97, 1.03)	1.06*** (1.03, 1.09)
log ASB stops per capita * % Black	1.04*** (1.02, 1.07)	1.01 (0.99, 1.03)	1.02** (1.00, 1.05)
Constant	0.66 (0.27, 1.63)	1.99 (0.86, 4.58)	0.79 (0.36, 1.75)
Pseudo R ²	0.50	0.35	0.52
N	568	568	566

Note: *p < .10; **p < .05; ***p < .01. ASB: anti-social behaviour

Table 7: Marginal Effect of Asian Share on ASB Policing and Turnout

	2012	2014	2016
log ASB stops per capita	0.96*** (0.93, 0.99)	0.95*** (0.93, 0.98)	0.97*** (0.95, 0.99)
% Asian	0.96*** (0.93, 0.98)	0.99 (0.97, 1.01)	0.96*** (0.94, 0.98)
log population	0.97 (0.92, 1.03)	0.93*** (0.88, 0.98)	1.01 (0.96, 1.06)
log house price	1.01 (0.95, 1.06)	0.98 (0.93, 1.03)	1.01 (0.96, 1.06)
% homeowners	3.69*** (2.85, 4.77)	1.65*** (1.32, 2.08)	2.39*** (1.93, 2.95)
% social renters	1.83*** (1.55, 2.15)	1.06 (0.91, 1.25)	1.25*** (1.07, 1.45)
% single parent family households	0.77 (0.49, 1.21)	0.58*** (0.39, 0.86)	0.67** (0.48, 0.94)
% level 1 education level or below	0.31*** (0.24, 0.40)	0.78* (0.61, 1.00)	0.28*** (0.22, 0.35)
% unemployed	1.00 (0.93, 1.07)	1.12*** (1.05, 1.19)	1.07** (1.01, 1.13)
% Black Caribbean	0.96*** (0.94, 0.99)	0.97*** (0.95, 0.99)	1.02*** (1.01, 1.03)
% Black African	1.05*** (1.04, 1.07)	1.00 (0.99, 1.01)	0.97*** (0.96, 0.99)
% Muslim	1.05*** (1.02, 1.08)	1.01 (0.98, 1.03)	1.04*** (1.02, 1.06)
log ASB stops per capita * % Asian	1.04*** (1.02, 1.07)	1.03** (1.01, 1.06)	1.03*** (1.01, 1.06)
Constant	0.46* (0.18, 1.16)	1.31 (0.55, 3.08)	0.47* (0.21, 1.07)
Pseudo R ²	0.51	0.36	0.55
N	568	553	524

Note: *p < .10; **p < .05; ***p < .01. ASB: anti-social behaviour

Table 8: Marginal Effect of Muslim Share on ASB Policing and Turnout (London)

	2012	2014	2016
log ASB stops per capita	0.97** (0.94, 0.99)	0.95*** (0.93, 0.98)	0.97** (0.95, 0.99)
% Muslim	1.01 (0.99, 1.02)	1.00 (0.98, 1.01)	1.00 (0.99, 1.02)
log population	0.97 (0.92, 1.03)	0.93*** (0.88, 0.98)	1.01 (0.96, 1.06)
log house price	1.04 (0.99, 1.09)	0.98 (0.94, 1.03)	1.04* (1.00, 1.09)
% homeowners	3.24*** (2.51, 4.18)	1.59*** (1.27, 1.99)	2.15*** (1.74, 2.66)
% social renters	1.77*** (1.51, 2.09)	1.05 (0.89, 1.23)	1.22** (1.04, 1.42)
% single parent family households	0.9 (0.57, 1.40)	0.59*** (0.40, 0.87)	0.76 (0.55, 1.06)
% level 1 education level or below	0.33*** (0.25, 0.42)	0.79* (0.62, 1.01)	0.29*** (0.23, 0.37)
% unemployed	0.99 (0.92, 1.06)	1.12*** (1.05, 1.19)	1.06** (1.00, 1.11)
% Black Caribbean	0.97** (0.95, 0.99)	0.97*** (0.95, 0.99)	1.02*** (1.02, 1.03)
% Black African	1.06*** (1.05, 1.07)	1.00 (0.99, 1.01)	0.98** (0.96, 1.00)
log ASB stops per capita * % Muslim	1.05*** (1.03, 1.08)	1.02** (1.00, 1.04)	1.04*** (1.02, 1.06)
Constant	0.27*** (0.11, 0.65)	1.21 (0.54, 2.68)	0.29*** (0.14, 0.62)
Pseudo R ²	0.50	0.35	0.55
N	568	553	524

Note: *p < .10; **p < .05; ***p < .01. ASB: anti-social behaviour

Table 9: Marginal Effect of % Black on Stop and Search Policing and Turnout
(Greater Manchester and the West Midlands)

	2015	2016
log stop and search per capita	0.96*** (0.94, 0.98)	0.98 (0.94, 1.03)
% Black	0.96*** (0.93, 0.99)	1.01 (0.93, 1.09)
log population	0.90*** (0.85, 0.95)	0.94 (0.81, 1.09)
% homeowners	1.80*** (1.67, 1.94)	2.30*** (1.85, 2.86)
% social renters	1.29*** (1.15, 1.45)	1.31* (0.95, 1.81)
% single parent family households	0.52*** (0.37, 0.73)	0.21*** (0.08, 0.53)
% level 1 education level or below	0.46*** (0.41, 0.52)	0.45*** (0.32, 0.65)
% unemployed	1.03*** (1.01, 1.05)	1.08*** (1.03, 1.14)
% Indian	0.99*** (0.98, 1.00)	0.98** (0.95, 1.00)
% Pakistani	0.99 (0.98, 1.00)	1.01 (0.98, 1.04)
% Bangladeshi	1.00 (1.00, 1.01)	1.01 (0.99, 1.03)
% Muslim	1.03*** (1.01, 1.04)	1.06** (1.01, 1.11)
log stop and search per capita * % Black	0.99*** (0.99, 1.00)	1.00 (0.99, 1.01)
Constant	1.51 (0.83, 2.74)	0.73 (0.14, 3.80)
Pseudo R ²	0.76	0.61
N	353	344

Note: *p < .10; **p < .05; ***p < .01

**Table 10: Marginal Effect of % Asian on Stop and Search Policing and Turnout
(Greater Manchester and the West Midlands)**

	2015	2016
log stop and search per capita	0.99 (0.98, 1.01)	1.03** (1.00, 1.07)
% Asian	0.99 (0.96, 1.02)	1.11*** (1.04, 1.18)
log population	0.90*** (0.85, 0.96)	0.91 (0.76, 1.06)
% homeowners	1.83*** (1.76, 1.91)	2.30*** (2.09, 2.51)
% social renters	1.29*** (1.18, 1.40)	1.36* (1.05, 1.67)
% single parent family households	0.48*** (0.14, 0.82)	0.21*** (-0.71, 1.12)
% level 1 education level or below	0.49*** (0.37, 0.60)	0.49*** (0.17, 0.82)
% unemployed	1.03*** (1.01, 1.05)	1.08*** (1.03, 1.12)
% Black Caribbean	1.00 (0.99, 1.01)	1.00 (0.97, 1.03)
% Black African	1.00 (0.99, 1.01)	1.00 (0.96, 1.03)
% Muslim	1.03*** (1.01, 1.04)	1.07*** (1.04, 1.11)
log stop and search per capita * % Asian	1.00 (1.00, 1.00)	1.02*** (1.01, 1.03)
Constant	1.73* (1.13, 2.33)	1.29 (-0.33, 2.91)
Pseudo R ²	0.76	0.62
N	374	366

Note: *p < .10; **p < .05; ***p < .01

**Table 11: Marginal Effect of % Muslim on Stop and Search Policing and Turnout
(Greater Manchester and the West Midlands)**

	2015	2016
log stop and search per capita	1.00 (0.98, 1.01)	1.02 (0.99, 1.05)
% Muslim	1.03** (1.00, 1.06)	1.15*** (1.07, 1.23)
log population	0.89*** (0.83, 0.94)	0.89 (0.73, 1.04)
% homeowners	1.83*** (1.75, 1.91)	2.35*** (2.13, 2.57)
% social renters	1.29*** (1.17, 1.41)	1.39** (1.06, 1.71)
% single parent family households	0.51*** (0.16, 0.87)	0.20*** (-0.75, 1.16)
% level 1 education level or below	0.47*** (0.35, 0.59)	0.45*** (0.09, 0.80)
% unemployed	1.03*** (1.01, 1.05)	1.08*** (1.03, 1.13)
% Black Caribbean	1.00 (1.00, 1.01)	1.00 (0.97, 1.02)
% Black African	1.00 (0.99, 1.01)	1.01 (0.98, 1.04)
% Indian	0.99** (0.98, 1.00)	0.98 (0.96, 1.00)
% Pakistani	0.99 (0.98, 1.00)	1.00 (0.97, 1.04)
% Bangladeshi	1.00 (1.00, 1.01)	1.01 (0.99, 1.03)
log stop and search per capita * % Muslim	1.00 (1.00, 1.01)	1.01*** (1.01, 1.02)
Constant	2.11** (1.48, 2.74)	1.67 (-0.03, 3.27)
Pseudo R ²	0.76	0.62
N	351	342

Note: *p < .10; **p < .05; ***p < .01.

Analysis with Inner City Wards Dropped

As noted in Footnote 11, the spatial concentration of ASB policing in City of London and downtown/inner city areas may present some problems for the analysis. Given the large day-time populations of non-residents in these wards, as well as the spatial concentration of London's nighttime economy in these areas, it may be the case that a large fraction of police interactions that occur here do not affect local residents or voters. I therefore test the robustness of the results presented in the main text by dropping electoral wards located in these downtown areas. Using a definition of downtown London and its Central Activities Zone provided by the Greater London Authority,¹ I first identify all electoral wards in this zone then rerun both the binomial and panel regression models without them. Results of the analysis are displayed in Table 12 and Table 14.

A similar concern might affect the results of the effect of stop and search policing in Greater Manchester and the West Midlands, so using similarly available public maps,² I remove wards in these counties that wholly or substantially contain downtown business areas and rerun the analysis. Results are displayed in Table 13.

In both cases, the results are consistent with the results presented in the main text.

¹<https://data.london.gov.uk/dataset/central-activities-zone-boundary-london-plan-consultation-2009>

²<https://web.archive.org/web/20081221064705/http://www.gvagrimley.co.uk/PreBuilt/Research%20web/Add%20on/ManchesterOfficeReportSpring08.pdf>
http://medweb4.bham.ac.uk/websites/key_health_data/2005/figures/ch_01/fig_01.02.htm
<http://bigcityplan.birmingham.gov.uk/wp-content/uploads/2010/08/Big-City-Plan-Boundary.pdf>

Table 12: Effect of ASB Policing on Voter Turnout in London, Inner City Wards Removed

	2012	Δ	2014	Δ	2016	Δ
log ASB stops per capita	0.97** (0.94, 1.00)	-1.6	0.96*** (0.93, 0.99)	-2.1	0.98* (0.96, 1.00)	-1.2
log population	0.97 (0.92, 1.03)	-0.7	0.94** (0.89, 0.99)	-1.9	1.01 (0.97, 1.06)	0.4
log house price	1.01 (0.95, 1.07)	0.4	0.98 (0.93, 1.04)	-0.7	1 (0.95, 1.05)	-0.2
% home owners	3.28*** (2.52, 4.27)	10.6	1.66*** (1.31, 2.11)	4.9	2.47*** (2.00, 3.05)	9
% social renters	1.45*** (1.22, 1.72)	4.7	1 (0.85, 1.18)	0.1	1.18** (1.01, 1.37)	2.1
% single parent	0.64* (0.40, 1.02)	-2.3	0.57*** (0.38, 0.85)	-3.3	0.57*** (0.41, 0.79)	-3.5
% level 1 education level or below	0.36*** (0.27, 0.46)	-8.2	0.77** (0.60, 1.00)	-2.1	0.28*** (0.22, 0.36)	-10.4
% unemployment	1.01 (0.95, 1.09)	0.5	1.14*** (1.07, 1.21)	5.1	1.08*** (1.02, 1.14)	3.2
% Black Caribbean	0.96*** (0.94, 0.99)	-3.5	0.96*** (0.94, 0.98)	-4.3	1.02*** (1.01, 1.03)	3.2
% Black African	1.05*** (1.04, 1.06)	4.3	1 (0.99, 1.01)	-0.1	0.97*** (0.95, 0.99)	-4.2
% Indian	0.98*** (0.96, 0.99)	-2.2	0.99 (0.98, 1.01)	-0.6	0.98*** (0.97, 0.99)	-2.1
% Pakistani	0.96*** (0.95, 0.98)	-3.9	0.99 (0.98, 1.01)	-0.6	0.98*** (0.97, 0.99)	-3.3
% Bangladeshi	0.99** (0.97, 1.00)	-1.4	1.01** (1.00, 1.03)	1.7	1 (0.99, 1.01)	0.5
% Muslim	1.08*** (1.05, 1.12)	6.7	0.99 (0.96, 1.02)	-0.7	1.04*** (1.02, 1.07)	4.2
Constant	0.38** (0.15, 0.97)	-	1.11 (0.46, 2.68)	-	0.53 (0.24, 1.17)	-
Pseudo R ²	0.54		0.37		0.58	
N	539		529		508	

Note: *p < .10; **p < .05; ***p < .01 First difference values in bold are significant at $\alpha \leq .10$. ASB: anti-social behaviour

Table 13: Effect of Stop and Search on Voter Turnout in Greater Manchester and the West Midlands, Inner City Wards Removed

	2015	Δ	2016	Δ
log stop and search per capita	0.99** (0.98, 1.00)	-1.2	0.98* (0.96, 1.00)	-2.5
log population	0.89*** (0.84, 0.94)	-3.7	0.95 (0.82, 1.11)	-1.3
% home owners	1.84*** (1.69, 1.99)	11.3	2.28*** (1.82, 2.87)	11.9
% social renters	1.31*** (1.16, 1.47)	3.0	1.30 (0.93, 1.81)	2.3
% single parent	0.51*** (0.36, 0.73)	-2.3	0.20*** (0.08, 0.53)	-4.4
% level 1 education level or below	0.46*** (0.41, 0.53)	-8.4	0.45*** (0.31, 0.65)	-7.2
% unemployed	1.03*** (1.01, 1.05)	2.1	1.08*** (1.02, 1.13)	4.4
% Black Caribbean	1.00 (1.00, 1.01)	0.9	1.00 (0.97, 1.03)	0
% Black African	1.00 (0.99, 1.01)	0.5	1.01 (0.98, 1.04)	1.4
% Indian	0.99** (0.98, 1.00)	-1.5	0.98** (0.95, 1.00)	-3.2
% Pakistani	0.99 (0.98, 1.01)	-1.1	1.01 (0.98, 1.04)	1.6
% Bangladeshi	1.00 (1.00, 1.01)	0.4	1.01 (1.00, 1.03)	2.2
% Muslim	1.02*** (1.01, 1.04)	3.3	1.05* (1.00, 1.10)	5.0
Constant	1.95** (1.07, 3.57)	-	0.64 (0.12, 3.36)	-
Pseudo R ²	0.76		0.6	
N	349		340	

Note: *p < .10; **p < .05; ***p < .01 First difference values in bold are significant at $\alpha \leq .10$.

Table 14: Fixed Effect Panel Regression Models: ASB in London, Inner City Wards
Removed

	Model 1	Model 2	Model 3
log ASB stops per capita	-0.04*** (-0.05, -0.03)	-0.02*** (-0.03, -0.01)	-0.01*** (-0.02, -0.004)
log population	0.34*** (0.23, 0.44)	0.12*** (0.03, 0.21)	0.03 (-0.04, 0.09)
log house price	0.01 (-0.01, 0.03)	-0.07*** (-0.10, -0.05)	-0.01 (-0.02, 0.01)
% home owners	0.51*** (0.16, 0.86)	0.07 (-0.26, 0.40)	-0.13 (-0.43, 0.17)
% social renters	0.44*** (0.19, 0.70)	0.22* (-0.03, 0.46)	0.08 (-0.14, 0.31)
% single parent	-1.13*** (-1.57, -0.68)	-1.27*** (-1.66, -0.89)	-0.73*** (-1.15, -0.30)
% level 1 education level or below	-0.63*** (-0.86, -0.39)	-0.17 (-0.39, 0.04)	0.04 (-0.20, 0.28)
% Black Caribbean	-0.0001 (-0.01, 0.01)	0.01* (-0.0005, 0.01)	0.0005 (-0.001, 0.002)
% Black African	-0.02*** (-0.02, -0.01)	-0.01 (-0.01, 0.001)	-0.003*** (-0.004, -0.001)
% Indian	-0.02 (-0.04, 0.004)	0.002 (-0.02, 0.02)	-0.003 (-0.02, 0.01)
% Pakistani	0.01* (-0.002, 0.03)	0.02*** (0.01, 0.03)	-0.002 (-0.01, 0.001)
% Bangladeshi	0.17*** (0.09, 0.25)	0.003 (-0.05, 0.06)	0.005 (-0.04, 0.05)
% Muslim	-0.001 (-0.02, 0.02)	0.003 (-0.02, 0.02)	0.03*** (0.01, 0.05)
2014 Dummy	-	0.06*** (0.05, 0.06)	0.05*** (0.04, 0.06)
2016 Dummy	-	0.09*** (0.07, 0.11)	0.08*** (0.06, 0.09)
λ	-	-	0.761 (0.724, 0.798)
N	1,576	1,576	1,576
R ²	0.66	0.70	0.89

Note: * p < .10; ** p < .05; *** p < .01. λ denotes the spatial error parameter. ASB: anti-social behaviour