Online Appendix for "Relying on the Ground Game"

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Variable Sources and Explanations

Battleground: Battleground states appear as listed in Shaw (2006), used to determine 2004 battleground states), and Jamieson (2009), used to determine 2008 battleground states. Note that these sources use the campaign's definitions of battleground states to determine whether or not a state is actually a "battleground" state. In 2012, we used data from *The New York Times* before the fall campaign began (see Cooper 2012).

Election Returns, 2004, 2008, and 2012 : As explained in the text, these are county-level Presidential election returns, House district-level election returns, modeled in the paper as percent Democratic. Data are for 2004 and 2008. Data come from Dave Leip's Atlas of US Presidential Elections; http://uselectionatlas.org/.

Election Returns (House), 2002 and 2006: Taken from *The Almanac of American Politics*: Barone and Cohen (2005) and Barone and Cohen (2009).

Election Returns (Presidential), 2000: Taken from Gomez, Hansford, and Krause (2007).

Field Offices: Indicates whether there were 1 or more Kerry/Obama field offices in a county. Data for 2004 and 2008 come the Democracy in Action Project at George Washington University (www.gwu.edu/~action/). In 2012, our data come from the Obama and Romney campaigns' official websites, taken on Election Day to ensure the complete listing of field offices.

Incumbency (House Elections): Data taken from Barone and Cohen (2005) and Barone and Cohen (2009).

Campaign Spending (House Elections): Data taken from Barone and Cohen (2005) and Barone and Cohen (2009).

Demographic Variables: All demographic variables come from official government statistics.

- County-level Population[1] and Median Age:[2]
  SOURCE: http://www.census.gov/popest/counties/
- Median income (2008):[3]
  SOURCE:
  http://www.census.gov/did/www/saipe/data/statecounty/data/2008.html
- Percentage White, Percentage Black, Percentage Hispanic (2005):

[1] Population is measured in millions of people in table 1.
[2] Median age is measured in hundreds of years in table 1.
[3] Median income is measured in hundreds of thousands of dollars in table 1.

SOURCE: http://www.census.gov/statab/ccdb/cc07_tabB3.xls

- Education Variables (2000):
  SOURCE: http://www.ers.usda.gov/data/education/Education.xls

Placebo Tests

The results in the body of the text suggest a modest but substantively important effect of field offices on turnout and a candidate's vote share, but they may be sensitive to omitted variables for which we do not (or cannot) account for in our analysis. We conducted a series of placebo tests to evaluate the sensitivity of our results to such biases. Our strategy is to use the placement of field offices at time *t* to predict outcomes at time *t-1*. Obviously, events at time *t* cannot predict outcomes at *t-1*: 2008 field offices cannot logically cause changes in 2004 vote share under any reasonable definition of causality. If we find an effect of time t field offices on time *t-1* vote outcomes, that finding would be problematic, and demonstrates the presence of some omitted variable driving our results (i.e., that field offices may have little effect on outcomes and are simply being placed in locations where the campaign would do well even without such offices).

Table A1 below gives the results of this placebo test, predicting 2004 vote share as a function of 2008 field office placement.

	(1)	(2)
2000 Bush vote share	**0.95**	**0.95**
	(0.01)	**(0.01)**
96-00 Swing in Republican Vote Share		**0.05**
		(0.01)
2008 Field Office	-0.0004	-0.0003
	(0.001)	(0.001)
2004 Population	0.00	0.00
	(0.00)	(0.00)
2004 Population	0.00	0.00

Density		
	(0.00)	(0.00)
Population Change, 2003-2004	0.01	0.01
	(0.03)	(0.03)
Urbanicity	-0.00	-0.00
	(0.00)	(0.00)
Median Income, 2004	0.00	0.00
	(0.00)	(0.00)
Percent Caucasian	0.00	0.00
	(0.00)	(0.00)
Percent African-American	-0.00	-0.00
	(0.00)	(0.00)
Percent Hispanic	-0.00	0.00
	(0.00)	(0.00)
Percent without a HS Diploma	**-0.04**	**-0.04**
	(0.01)	**(0.01)**
Percent with College Degree	**-0.21**	**-0.20**
	(0.01)	**(0.01)**
Constant	0.08	0.08
	(0.01)	(0.01)
Includes State Fixed Effects?	Y	Y
Observations	3111	3111
R-squared	0.969	0.969

Table A1: Placebo Tests, Presidential Vote Data
Note: cell entries are OLS regression coefficients predicting 2004 Bush vote share as a function of 2008 field offices and observables; see the text for additional details.

Our results here show no placebo effects. Conditional on observable variables, we find no significant effect of a 2008 field office on 2004 presidential vote share.

To supplement this analysis even further, we conducted two additional placebo tests: (1) using 2008 field offices to predict 2006 House vote share and (2) using the difference between 2004 and 2008 field offices to predict 2006 House vote share. Test 1 follows the logic we described above; test 2 uses a slightly different design, and asks

whether *changes* in field offices predict House vote share. This allows us to rule out the argument that field offices are simply placed in areas trending Democratic, and so any effects we find are simply an artifact of that trend. Table A2 gives the results.

	(1)	(2)
2008 Obama Field Office	0.0002	
	(0.00)	
Change in Field Offices, 2004-2008		-0.0004
		(0.00)
2004 House Democratic Vote Share	**0.47**	**0.47**
	(0.04)	**(0.04)**
Democratic Incumbent	**0.14**	**0.14**
	(0.02)	**(0.02)**
Constant	0.26	0.26
	(0.01)	(0.01)
Observations	435	435
R-squared	0.681	0.681

Table A2: Placebo Tests, House Vote Data
Note: cell entries are OLS regression coefficients predicting 2006 House Democratic vote share as a function of 2008 field offices (or change in 2004-2008 field offices) and observables; see the text for additional details.

Again, as in the body of the paper, our results here show no placebo effects. Conditional on observable variables, we find no significant effect of a 2008 field office on 2006 House vote share; similarly, we find no effect of 2004-2008 changes in field office placement on 2006 House vote share, ruling out a simple trend explanation. Of course, no placebo analysis can ever completely rule out the possibility of omitted variable bias, or a trend (not captured in our data) that explains our results; this is simply a fact of conducting analysis with observational data. That said, these results should bolster the reader's confidence in the claims we make in the body of the text.

2012-Specific Effects Results

	(1)	(2)
Net Field Offices	**0.452**	**0.741**
(Obama-Romney)	**(0.103)**	**(0.243)**
Battleground State		-0.414
		(0.632)
Battleground State*		-0.347
Net Field Offices		(0.264)
Normal Vote (% Rep)	**-1.103**	**-1.102**
	(0.00664)	**(0.00667)**
Constant	103.4	103.3
	(0.597)	(0.598)
Observations	3113	3113
R-squared	0.939	0.939

Table A3: Results showing the effects of net field offices (Obama offices less Romney offices) on 2012 Democratic vote share.

The results in table A3 show that net field offices (number of Obama offices less number of Romney offices) have a positive and significant effect on Obama's vote share in the county. Column 1 shows the average effect, and column 2 shows that there is no difference by battleground status (while there are more field offices in battleground states, there is also more campaign activity there, which likely cancels out the office effect). The results here reinforce the results from table 2 of the paper: field offices have a modest effect on presidential vote share.

A Micro-Level Test of Field Offices and Voter Contact

The results in the body of the paper show how field offices shape vote share. While we argued this was due to differential mobilization of a candidate's supporters, given

aggregate data, we could not provide any direct evidence on this point. To supplement our analysis above, we now turn to two individual-level analyses. First, we examine whether voters who live in a county with a field office are more likely to be contacted by a campaign, focusing here on the 2008 election using the National Annenberg Election Study (NAES) panel data. If our theoretical story is correct, then we should find that voters living in counties with field offices should be more likely to be contacted. Table A4 presents our results.

	(1) Any Contact	(2) FTF	(3) Letter	(4) Email	(5) Phone Call
Live in a County with Field Offices	**0.15**	**0.51**	**0.17**	0.06	**0.13**
	(0.06)	**(0.14)**	**(0.06)**	(0.07)	**(0.07)**
Battleground State	**0.31**	**0.46**	**0.19**	-0.08	**0.37**
	(0.06)	**(0.13)**	**(0.06)**	(0.07)	**(0.07)**
Voted in 2004	**0.35**	-0.03	**0.43**	**0.26**	**0.31**
	(0.07)	(0.22)	**(0.10)**	**(0.12)**	**(0.09)**
Voted in 2006	**0.68**	**0.68**	**0.80**	**0.74**	**0.51**
	(0.06)	**(0.16)**	**(0.07)**	**(0.10)**	**(0.07)**
Union Household	**0.11**	0.03	0.06	0.07	0.18
	(0.06)	(0.15)	(0.07)	(0.08)	(0.07)
Military Service	**0.11**	0.04	**0.18**	**0.24**	0.08
	(0.07)	(0.17)	**(0.07)**	**(0.10)**	(0.08)
Evangelical	0.05	**-0.44**	0.01	**-0.16**	0.07
	(0.05)	**(0.14)**	(0.06)	**(0.07)**	(0.05)
Hispanic	-0.04	0.01	-0.05	-0.12	-0.13
	(0.15)	(0.40)	(0.15)	(0.22)	(0.16)
Caucasian	-0.01	0.00	0.09	-0.01	-0.04
	(0.11)	(0.32)	(0.12)	(0.17)	(0.11)
African-American	0.18	0.58	0.06	0.27	0.07
	(0.14)	(0.36)	(0.15)	(0.19)	(0.15)
Household Income	**0.03**	**0.04**	**0.05**	**0.06**	**0.02**
	(0.01)	**(0.02)**	**(0.01)**	**(0.01)**	**(0.01)**
Education	**0.17**	**0.21**	**0.20**	**0.17**	**0.11**
	(0.01)	**(0.03)**	**(0.02)**	**(0.02)**	**(0.02)**
Age	**0.20**	0.02	**0.32**	**0.13**	**0.12**
	(0.02)	(0.04)	**(0.02)**	**(0.02)**	**(0.02)**
Male	**-0.18**	**-0.20**	-0.08	-0.16	**-0.27**
	(0.05)	**(0.12)**	(0.06)	(0.07)	**(0.05)**
Married	-0.07	**-0.21**	-0.02	**-0.29**	0.03
	(0.05)	**(0.12)**	(0.06)	**(0.07)**	(0.06)
Homeowner	**0.12**	0.10	-0.03	-0.12	**0.24**
	(0.06)	(0.16)	(0.07)	(0.08)	**(0.07)**

Constant	**-3.28**	**-5.79**	**-5.14**	**-4.42**	**-3.23**
	(0.17)	**(0.49)**	**(0.19)**	**(0.26)**	**(0.18)**
Observations	9797	9797	9797	9797	9797
Pseudo-R^2	0.08	0.06	0.10	0.06	0.04

Table A4: Field Office Location and Voter Contact, NAES Data
Note: cell entries are logistic regression coefficients with robust standard errors in parentheses (standard errors are clustered at the county-level). Coefficients that can be distinguished from 0 at conventional levels are given in **bold.**

Column 1 strongly supports our argument about the role of field offices. Even controlling for a number of demographic and attitudinal factors known to affect the probability of campaign contact (Hillygus & Shields, 2008, Rosenstone & Hansen, 1993), voters who live in counties with field offices are more likely to report being contacted by a campaign. All else equal, living in a county with a field office increases the probability of contact by approximately three percent (from 25 percent to 28 percent), supporting our argument about the underlying mechanism.

We can go further in support of our claim by analyzing the different kinds of contact recorded by the NAES. If voters report being contacted, they are asked whether that contact came via a face-to-face interaction with a campaign worker, a letter, a phone call, or an email. If our argument is correct (that field offices specifically promote in-person mobilization), we should expect to see the biggest effect of field office proximity on face-to-face contact, with smaller effects on the other forms of contact, especially email. Looking at columns 2 through 5, we find exactly this. The largest effect comes for face-to-face contact: all else equal, individuals living in a county with a field office approximately double their likelihood of face-to-face contact. There are also significant (albeit smaller) effects for letters and phone calls (though the phone call effect is only marginally statistically significant, p=0.052, two-tailed). The effect on email, however,

falls far short of statistical significance. We find the largest effects on the most intensive form of contact (face-to-face), with smaller effects on less intensive forms of contact, to non-existent effects for the least intensive forms of contact (email). This provides us with a strong evidentiary basis for arguing that field offices do, in fact, serve as key points of voter mobilization.

Works Cited (Not Cited in the Main Body of the Text):

Barone, M., & Cohen, R. (2005). *The Almanac of American Politics, 2006 Edition*. Washington, D.C.: National Journal.

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Gomez, B., Hansford, T. & Krause, G. (2007). The Republicans Should Pray for Rain: Weather, Turnout, and Voting in U.S. Presidential Elections. *Journal of Politics* 69(3): 647-61.

Hillygus, D. S., & Shields, T. (2008). *The Persuadable Voter: Wedge Issues in Presidential Campaigns.* Princeton, NJ: Princeton University Press.

Jamieson, K. H. (2009). *Electing the President 2008: The Insider's View.* Philadelphia, PA: University of Pennsylvania Press.