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Swearingen, Colin D. (2018) "The Impact of Presidential Field Offices in Ohio, 2008-2012," *The Journal of Economics and Politics*: Vol. 24 : Iss. 1 , Article 2.

Available at: <https://collected.jcu.edu/jep/vol24/iss1/2>

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The Impact of Presidential Field Offices in Ohio, 2008-2012

Cover Page Footnote

The author would like to thank John Carroll University for providing a research fellowship to pursue this project, faculty of the JCU Political Science Department for supplying critical feedback, and panelists at the 2015 Midwest Political Science Association for reviewing an early version of this manuscript.

I. Introduction

One of the lasting lessons of the Obama presidential campaigns, both in 2008 and 2012, was its success in the ground game. This success is touted not only by the mainstream media (see Ball 2012; Sinderbrand 2012), but political scientists as well (Chen & Reeves, 2011; Osborn, McClurg, & Knoll, 2010; Panagopoulos & Francia, 2009). One way in which the Obama campaigns flexed their muscle was their numerical advantage in field offices. In 2008, Obama's ability to raise massive amounts of money, in conjunction with a massive network of campaign volunteers helped him establish over 700 field offices across the country, compared to less than 400 for Senator John McCain. In 2012, his advantage was even wider: 786 field offices compared to Mitt Romney's 284 (Sides, 2012).

While the sheer number of Obama field offices compared to his Republican opponents reflects contrasting campaign strategies, it is worth asking if this advantage helped him win both elections. Is the conventional wisdom surrounding the dominance of the Obama ground game valid? Did Obama's field office advantage come through for him on Election Day? This study explores the impact of field offices on general election results for the 2008 and 2012 presidential campaigns in the consummate battleground state of Ohio and makes two key contributions to the elections literature. First, previous literature explores the impact of field offices at the county level, although the purpose of Obama field offices was to serve as the campaign's community hub. While we replicate the model specifications in these studies, we present the first study of presidential field offices that makes use of spatial regression to account for the inherent spatial autocorrelation of local politics. Second, we demonstrate that the Obama field office advantage in the Buckeye State led to electoral benefits. A community's proximity to an Obama field office led to a substantively significant increase in vote share in 2012 as well as an increase in voter turnout in both 2008 and 2012. A key implication of this finding is that campaigns have an incentive to decentralize their ground game rather than concentrating their firepower in a few locations.

II. Campaign Effects & Presidential Field Offices

Many early scholars in the elections subfield marginalized the effect of campaigns on election outcomes. Despite all of the money, debates, and public attention, evidence of campaign effects eluded political scientists for decades. These works conclude that voters make up their minds well in advance of Election Day (Berelson, Lazarsfeld, & McPhee, 1986; Lazarsfeld & Gaudet, 1968), that partisanship is highly stable and thus limits a campaign's impact (Campbell, Converse, Miller, & Stokes, 1960), or that certain structural variables such as the economy and incumbent approval ratings can adequately explain electoral results without accounting for campaign activity (Lewis-Beck & Rice, 1992).

The last 15-20 years of elections literature has changed this narrative by establishing a link between campaign activities and increased voter mobilization. In particular, a burgeoning literature utilizing field experiments focuses on the impact of get-out-the-vote (GOTV) activities such as door-to-door canvassing, phone calls and direct mail. Door-to-door campaigning, valued for its ability to create face-to-face contact between a campaign and potential voters, is seen as a particularly economical way to increase voter mobilization, in some cases as high as 11 percent (Gerber and Green 2000; Alvarez, Hopkins, and Sinclair 2010; Sinclair, McConnell, and

Michelson 2013; but see Nickerson, Friedrichs, and King 2006). Additional scholars explore the link between phone calls and mobilization with mixed results. Whereas early experimental work concluded that phone calls were not an effective tactic to mobilize voters in a nonpartisan campaign (Gerber & Green, 2000), ensuing studies produced more nuanced results. Specifically, phone canvassing can significantly increase turnout in partisan elections regardless of whether the calls are made by volunteers or professionals (Nickerson, 2005, 2007; Nickerson et al., 2006). Moreover, the timing of phone calls can be important; Alvarez, Hopkins, and Sinclair (2010) find that potential voters contacted either in-person or via phone during the final week of the campaign are more likely to vote than those contacted earlier.

These recent experimental studies frequently validate some non-experimental studies in finding a link between campaign efforts and voter mobilization. Caldeira, Clausen, and Patterson (1990), in an analysis of the 1986 Ohio statewide elections, note that campaigning and partisan efforts to increase voter turnout were successful, as those who received campaign literature and were contacted by a political party were significantly more likely to vote. Other scholars show that high-profile presidential campaign events such as debates and party conventions increase the likelihood of voting among both intended voters and those more hesitant to cast a ballot (Hillygus, 2005; Hillygus & Jackman, 2003). Parties also play a role in mobilizing the electorate; as they spend more on GOTV efforts, turnout likewise increases (Holbrook & McClurg, 2005).

Campaigns have noticed the importance of GOTV efforts and begun to implement them in an effort to increase turnout among base supporters (Kramer, 1970). As Panagopoulos and Wielhouwer (2008) note, campaigns are increasingly contacting voters, finding that both the Kerry and Bush campaigns vigorously courted their base voters in 2004. Holbrook and McClurg (2005) find that a political party's spending advantage not only increases turnout among its partisans, but also changes the victory margin. Of course, the composition of the electorate does not merely have to be stated in partisan terms; as the parties seek to identify potential supporters, they identify any individual who may be predisposed to vote for their candidate. For instance, low-income voters in battleground states were more likely to be interested and involved in the 2004 presidential election due to the campaigns' investment in these key states (Gimpel, Kaufmann, & Pearson-Merkowitz, 2007).

While the preponderance of evidence indicates that campaigns play a significant role in elections, we are uncertain how these GOTV efforts affect a candidate's vote share, particularly at the presidential level. This is where we may see the importance of field offices. Field offices play a critical role in a presidential campaign by serving as a hub for its GOTV efforts. The typical Obama 2012 field office had at least one staffer, served as a recruitment center for local volunteers, provided a central location for campaign events, phone banking and data collection, and allowed a campaign to develop local insight, build detailed voter files on potential supporters, field test the best ways to motivate them, and push them to the polls (Sinderbrand, 2012). By establishing local offices in critical areas throughout a battleground state, a national campaign can keep up with the vast amounts of voter information coming in. As Masket (2009) points out, coordinating massive GOTV campaigns requires recruiting thousands of volunteers to make phone calls and go door-to-door.

Despite the importance of field offices, little is known about how they can impact an election. Indeed, only three studies explore the relationship between field offices and election results. Presidential campaigns will invest in areas where their support is strongest and tend to place an office in swing areas if their opponent has already done so. The evidence suggests that field offices are effective in mobilizing voters (Darr & Levendusky, 2014). For instance, Obama's

2008 campaign was particularly successful in utilizing field offices to their advantage, increasing his share of the two-party vote by roughly one percent and yielding an additional 207,000 votes in swing states (Darr & Levendusky, 2014; Masket, 2009). Finally, while the 2012 Obama ground game added to his vote totals nationwide, these gains were not the difference maker in the Electoral College – he would have defeated Romney without as robust a ground game (Masket, Sides, & Vavreck, 2016; Sides & Vavreck, 2013).

Despite recent progress in understanding how presidential field offices influence electoral outcomes, much remains unknown. For instance, while Masket (2009) concluded that field offices helped Obama across 11 battleground states in 2008, his findings generally lost statistical significance when disaggregated by state.¹ This study attempts to address this gap by focusing on the placement of field offices across the state of Ohio in the 2008 and 2012 presidential elections. In the lead-up to the 2012 presidential election, Nate Silver (2012) calculated that Ohio had a 49.8 percent chance of providing the decisive electoral vote. As the quintessential battleground state, each presidential campaign rigorously courted the state’s nearly 5.5 million voters. This makes Ohio a perfect case study for determining how field offices impact election outcomes.

III. Why Field Office Proximity Matters

A. Theoretical Overview

Our theoretical expectations are straightforward and intuitive: field offices will have the strongest impact on communities closest to them. There are two components to this logic. First, we demonstrate that localized social interactions spread throughout and between proximal communities. In other words, campaign activity stemming from a field office has a “spillover effect” across community lines. As Darr and Levendusky (2014) recognize, the intended effects of a field office spread beyond community border. Jeremy Bird, Obama’s 2012 national field director noted, “Our focus is on having a very decentralized, organized operation as close to the precinct level as possible...It’s real, deep community organizing in a way we didn’t have time to do in 2008” (Ball, 2012, para. 17). The emphasis on community organizing and voter mobilization in the era of big data and micro targeting fits well with the mantra that “all politics is local.” Thus, while the Masket (2009) and Darr and Levendusky (2014) studies explore the effect of field offices at the county level, we lose the nuance of the truly local campaign efforts that take place at a field office.

The second component of our logic rests in understanding why a campaign wants to organize GOTV efforts at the local level. Campaign consultants acknowledge that getting neighbors to reach out to their communities is critical to GOTV operations. According to Jeremy Bird,

Community organizing is not a turnkey operation. You can’t throw up some phone banks in late summer and call that organizing. These are teams that know their turfs – the barber shops, the beauty salons; we’ve got congregation captains in churches. These people know their communities (Ball, 2012, para. 18).

Another Obama campaign official confirms this notion, stating that the campaign “wanted as many of [its] local people carrying your message as possible, as opposed to paid field organizers, or even imported volunteers from different parts of the country” (Masket, 2009, p. 1026). As Masket et al. (2016) note, presidential campaigns use phone and in-person

communication to persuade and/or mobilize specific voters. In short, there is a strategic element to keeping a nationwide campaign as local as possible.

Political science has in many ways validated the role of social context on voter mobilization; politically active individuals interact with other politically active individuals (Fowler, 2005; Nickerson, 2008; Schram & van Winden, 1991). McClurg (2003) argues that social interaction plays an important role in politics and that political discussion in particular leads to an increased likelihood of electoral participation. Scholars also find that voters are more likely to be influenced by campaigners from their own community and that the more personalized the contact, the more effect the contact is in increasing turnout (Nickerson, 2007; Sinclair et al., 2013).

Finally, Allen et al. (2014) argue that within the social context of a campaign, a community's proximity to a field office reflects the reality that campaign resources are limited, particularly in terms of volunteer hours. Opening more campaign offices within a certain distance of targeted communities minimizes volunteer commutes and allows the campaign to canvass in high-traffic areas that are close to the office. As a result, those who live closer to a field office have more contact with a campaign than those who live farther away, leading to a more politically charged climate. This can lead to both increased electoral performance for a particular campaign and increased voter mobilization overall.

B. How Proximity is Measured and the Obama Campaign's Field Office Advantage

If we are correct that field office proximity matters for campaign mobilization, then two questions should be addressed. First, how is proximity measured? We collected information on each of the presidential field offices in the 2008 and 2012 elections.² Each field office was geocoded based on its address. We then calculated the geographic centroid of each Ohio community in ESRI's ArcMap 10.2, which allowed us to count of the number of Democratic and Republican field offices within 10 miles of a community.

The second question is descriptive in nature: Did the Obama campaign have a field office advantage? Figures 1 and 2 provide a straightforward answer: The Obama campaigns simply dominated his GOP counterparts in the number and dispersion of field offices. In 2008 (Figure 1) Barack Obama held an 82 – 9 advantage with field offices in over half of Ohio's 88 counties. Equally as impressive as his numerical advantage, his ground game had a physical presence in all regions of the state. John McCain, on the other hand, maintained a field office in most of the populous counties: Cuyahoga (Cleveland) and Stark (Canton) in the northeast; Hamilton (Cincinnati), Butler (Hamilton) and Montgomery (Dayton) in the southwest; Franklin (Columbus) and Delaware (Delaware) in the center; and Lucas (Toledo) in the northwest. Outside of these major metropolitan areas, however, his campaign had no physical presence.

The descriptive statistics (see Table 1) suggest that, as Darr and Levensky (2014) find, the McCain and Obama campaigns utilized divergent strategies. The Obama campaign invested heavily in their core areas, but still placed numerous field offices in traditionally Republican areas, particularly in the western part of the state. For instance, despite placing field offices in Defiance and Henry counties (northwest corner of the state), Obama failed to win a majority of the vote in any of these communities. Only one community, Huntington Township in rural Brown County, was over 50 miles from the most proximal Obama/Biden '08 field office. More impressively, the average community was only 13.61 miles from the closest office, and half of Ohio's communities were within 7.18 miles of an office. The typical community had just under one Obama field office

within 10 miles of its center, although many communities in Cuyahoga County, such as Cleveland, Shaker Heights, and University Heights had in upwards of 8-10 field offices in close proximity.

The McCain campaign tended use field offices in Republican strongholds. Their placements in southwest Ohio illustrate this well: while they had an office in Cincinnati, it was on the western edge of the city, close to the heavily Republican suburbs. They had another office in Hamilton, a county north of Cincinnati, another traditional GOP stronghold.³ In a stark contrast to the Obama campaign, the average community was just over 43 miles from the closest McCain/Palin Victory Center, and 22 communities were at least 100 miles away. Finally, over half of Ohio's communities were at least 22+ miles from a McCain victory center, while a handful of suburban Dayton communities had two victory centers within 10 miles. These statistics clearly demonstrate the disparate ground game strategies by the two campaigns.

Four years later, there was again a significant numerical discrepancy in field offices (Figure 2). While the Romney campaign increased the number of GOP Victory Centers to 40, the Obama campaign saturated the state with 131 field offices. Similar to the 2008 campaign, Obama's field offices were dispersed across the whole state, with the southeast being the only exception. The Obama campaign opened 13 offices in Cuyahoga County, 12 offices in Franklin County, and 7 in Hamilton County. While the major cities, all heavily Democratic, were blanketed with Obama field offices, the campaign again took some risks by placing offices in the western part of the state and exurban Columbus. Every community was within 50 miles of an Obama field office, while the average community was a mere 11.79 miles away. Impressively, over half of the communities were within six miles of a field office, meaning many communities were very accessible to Obama's ground game volunteers.

The Romney campaign was more proactive than the McCain team in their placement of field offices, although many of their strongest communities were nowhere near a field office. This is particularly true in western and southeastern Ohio, where many communities were over 60 miles from a campaign field office. Overall, the average community was over 20 miles from a Romney/Ryan Victory Center and half were over 10 miles away; both of these distances were roughly double their Obama/Biden counterparts.

C. Hypotheses

These divergent ground game strategies provide a natural arena to test systematically the impact of field office locations on the outcomes of the 2008 and 2012 presidential elections. Given that presidential campaigns emphasize community-based voter mobilization efforts and that neighbors can have larger mobilization effects than non-neighbors, and the Obama campaigns' distinct field office advantage, we deduce the following relationships:

H_{1a}: Proximity to a Democratic field office will increase the share of the Democratic candidate's vote share.

H_{1b}: Proximity to a Republican field office will lower the share of the Democratic candidate's vote share.

H₂: Proximity to a field office will increase voter turnout.

IV. Data, Spatial Autocorrelation, and Spatial Regression

Testing the above hypotheses requires the construction of two straightforward dependent variables. The first set is the two-party vote for the major party nominees in both 2008 and 2012. The second dependent variable is the percentage of voter turnout in each year, calculated as the number of presidential voters divided by registered voters. Because we are interested in the influence of field offices at the community level rather than the county, we use the Census Bureau's county subdivisions as the unit of analysis. There are two benefits for using county subdivisions: they are at the sub-county level of analysis, and the Census provides a myriad of data for these communities through the 5-year American Community Survey (ACS).⁴ In 2008 there were 1,585 county subdivisions in Ohio; in 2012 there were 1,605. This means that nearly 99 percent of county subdivisions were unchanged after the 2010 Census. Following the analyses by Masket (2009) and Darr and Levendusky (2014), we include a standard battery of control variables, including the population of each community, the percent African American population, the percent Latino population, the percent senior population, the median household income, the unemployment rate, and the percent within a college degree. We also include controls for the number of campaign ads run by each party and their allies in 2008 (Goldstein, Niebler, Neiheisel, & Holleque, 2011) and 2012 (Fowler, Franz, & Ridout, 2017), along with the number of presidential and vice presidential candidate visits to each community (Democracy in Action, n.d.; George Washington University, n.d.). Finally, we control for partisanship by including the Democratic presidential candidate's share of the vote from the previous election (listed as Dem percent_{t-1} in the models). For the 2008 model, this is John Kerry's 2004 performance; for 2012 this is Barack Obama's 2008 performance.

Similar to Tam Cho and Gimpel (2010), we utilize spatial analysis to determine the impact of field office location on election results. While typical ordinary least squares regression may do an adequate job of explaining the average effect of interest, it is reasonable to believe that an analysis of individual communities may lead to spatial autocorrelation. Spatial autocorrelation is perhaps best embodied by *Tobler's First Law of Geography*, which states "Everything is related to everything else, but near things are more related than distant things" (ESRI N.D.a). In other words, communities and their associated data tend to be clustered together in space (ESRI N.D.b). First, the theoretical expectation is that field offices will impact the election due to the social interactions at the community level. The vigor of such community-based outreach can be expected to create spatial autocorrelation. Second, patterns of interactions between campaign volunteers and voters associated with modern campaign tactics such as micro targeting may heighten causal effects in some locations while depressing them in others. The intent of GOTV efforts is for contacts by a local office to spread beyond town borders (Darr & Levendusky, 2014). Finally, many communities have unique and complicated historical and cultural forces that impact political attitudes and behaviors.

Table 2 further verifies the presence of spatial autocorrelation: the global Moran's I test statistic is significant for all four dependent variables, allowing us to reject the null hypothesis that there is no spatial autocorrelation. The presence of spatial autocorrelation requires us to utilize some form of spatial regression to combat the spatial autocorrelation. Anselin (2005) specifies two types: a spatial lag model and a spatial error model. The former includes a spatially lagged dependent variable while the latter incorporates a spatial autoregressive error term. Based on our theory that a community's distance from a field office plays a significant role in turnout and candidate performance, we use spatial error models.

V. Does Field Office Location Impact Presidential Election Results?

Table 3 displays the results of the spatial regressions with the 2008 and 2012 Democratic (Obama) vote share as the dependent variable. In terms of goodness-of-fit, two measures indicate that the spatial regressions are an improvement over the traditional OLS models. First, the Akaike information criterion (AIC) decreases by moving from an OLS model to a spatial regression (see Table 1), suggesting the spatial regressions improve the overall model fit.⁵ Second, the spatial regression R-Squares for the overall 2008 and 2012 election results (first two columns of Table 2) are all at least 0.92, and the R-Squares for the turnout models range from 0.74 to 0.81. While the spatial regression R-Squares are not directly comparable to their OLS counterparts, they suggest that we are able to explain a significant amount of the variation in the dependent variables and that the spatial regressions are likely an improvement over the OLS models.

In examining the control variables, we see that many of the same factors that explain the national vote likewise explain the Ohio results. In 2008, communities that saw more Obama-affiliated TV ads, more densely populated and had higher percentages of African Americans, Latinos, college educated, and unemployed individuals gave Obama a higher share of the vote. Communities with higher median household incomes, on the other hand, tended to vote in higher propensity for McCain. The 2012 results were very similar except that the percent of unemployed individuals in a community was not statistically significant.

Moving on to our key explanatory variables, we find that the impact of field offices on presidential election results in Ohio is more complicated than prior research indicates. While the 2008 Obama campaign championed a new way of thinking about field office placement and GOTV operations, the spatial regression results indicate that they did not make a difference. In fact, proximity to 2008 McCain victory centers significantly impacted Obama's performance in a community, providing evidence in support of Hypothesis 1b. For each McCain/Palin victory center within 10 miles of community, Obama's share of the vote was expected to decrease by 0.74 percent. Unfortunately for the McCain campaign, most communities were not within 10 miles of a victory center, meaning the campaign's ground game did not make a substantive impact across the state. These findings also suggest that Obama's victory could be due to the context of the 2008 election. President Bush was unpopular, the economy was in the midst of the Great Recession, and Obama had a significantly larger campaign war chest.

While field office proximity did not play a key role in Obama's 2008 Ohio performance, his 2012 ground game was much more impressive. Not only did the campaign increase the number of field offices statewide, their ground game was much more effective. On average, each field office within 10 miles of a community added an expected 0.19 percent to Obama's vote share. With the average community having 1.33 field offices within 10 miles, this translated to nearly an additional one-quarter of a percent. More importantly, in communities saturated by Obama field offices (greater than two standard deviations away from the mean), this equated to an expected 0.75 percent of the vote. In some areas of the state, particularly Cleveland and Columbus, his campaign dedicated significant GOTV resources, placing in upwards of 9 – 12 field offices within 10 miles. The results from the spatial regression indicate that Obama received an expected 1.71 – 2.28 percent increase in his vote share from these field offices. These 2012 findings validate Obama's strategy to keep his field operations intact in the battleground states after the 2008 election and ramp up as November, 2012 approached (see Lake, Klaidman, and Jacobs 2012). The

Obama 2008 campaign laid the groundwork for 2012 in many of the same ways the 2002 GOP voter mobilization strategy set the state for Bush's 2004 72-hour GOTV program.

While the end goal of a campaign is to win the election, mobilization is ultimately about turnout. Much of the recent literature on campaign effects focuses on turnout rather than results (e.g., Enos & Fowler, 2014; McGhee & Sides, 2011; McKee, Hood III, & Hill, 2012). As such, Table 4 displays spatial regression model results using turnout in 2008 and 2012 as the dependent variables. Overall, the models explain quite a bit of the variation in turnout and represent an improvement over using traditional OLS regression.

Among the control variables in the 2008 model, communities with high population density, unemployment, and African American populations saw lower turnout, while those exposed to more TV ads, more senior citizens, college educated adults, and income saw higher turnout. The 2012 results were largely similar, although the Latino share of the population was statistically significant while population density and ad exposure were not.

More importantly for our analysis, the key explanatory variables were statistically significant in the expected direction. In 2008, each Obama field office located within 10 miles of a community turnout increased by an expected 0.32 percent. Given that the average community had 0.82 proximal Obama field offices, this translated to almost a 0.26 percent increase in turnout. Among communities that were one standard deviation above the mean, turnout was expected to increase by 0.43 percent. Finally, among the most targeted communities (those with 8 – 10 proximal offices), turnout was expected to rise by between 2.56 percent and 3.2 percent.

The Obama ground was equally effective in increasing turnout during the 2012 campaign. Each of his field offices located within 10 miles of a community turnout increased by an expected 0.27 percent. For the typical community, this translated to an increase of 0.36 percent. Among communities that were one standard deviation above the mean, turnout was expected to increase by 0.53 percent. Finally, among the most targeted communities (those with 9 – 12 proximal offices), turnout was expected to rise by between 2.43 percent and 3.24 percent. Given that these communities were in the most densely populated areas of the state, we can see why his ground game was able to increase his popular vote margin.

While there is evidence that the Obama ground game was effective in increasing turnout in 2008 and 2012, and vote sharing in 2012, the same cannot be said for Republicans. McCain spent half as much money on staffing as Obama and he scaled back the Bush 72-hour GOTV plan in an effort to finance television advertising. Furthermore, multiple media outlets reported that many McCain Victory Centers were actually closed during the campaign stretch-run; when they were open, they had reduced hours (Mosk, 2008; Quinn, 2008).

While the GOP's lack of effectiveness in 2008 was not very surprising, 2012 is a different story. In the lead up to Election Day, the conventional wisdom was that the Romney ground game, while not quite on par with Obama's, was much better than McCain's (Joseph & Stanage, 2012). Yet the Romney ground game was widely panned in the 2012 post-mortem. Its data system, Project Orca, crashed on Election Day. As one campaign official noted, "I think it's fair to say that pretty much everything about the system that was supposed to work actually failed". Despite the gloom-and-doom attitude from one official, the Romney campaign argued that Orca was able to help mobilize over 14 million voters over the course of the campaign (Lake et al., 2012). Still, despite the greater emphasis on GOTV in 2012 compared to 2008, evidence suggests that, if anything, the 2008 ground game was more effective in Ohio than the 2012 version.

All told, the 2012 results mirror Masket's (2009) and Darr and Levendusky's (2014) findings at the county level nationwide. The substantive lesson from these numbers is that, at the

margins, an emphasis on the ground game can make a difference. Saturating a battleground state with field offices does not change the fundamentals of an election, as we saw in 2008. Yet in an era of relatively close presidential elections (like in 2012), this strategy can maximize a candidate's chances of success.

VI. Conclusion

This study adds evidence to the argument that campaigns, and more specifically voter mobilization efforts, can affect election results. By replicating Masket's (2009), Darr and Levendusky's (2014) and Sides et al (2016) model specifications while actually controlling for spatial correlation, we find that a community's proximity to a presidential field office can make a difference. Evidence consistently indicates that Obama's field offices added to his overall share of the vote in the 2012 election in communities across the key battleground state of Ohio. On top of that, we find that his ground game increased voter turnout in both election cycles. While Obama's ground game was successful, his Republican counterparts struggled. McCain's victory centers statistically increased his performance, but its substantive impact was negligible. Romney's ground game was completely ineffective. For the GOP candidates, the distance between their victory centers and the communities they were trying to reach was too great to be effective. These findings dovetail nicely not only with studies done by Masket (2009) and Darr and Levendusky (2014), they support on-the-ground observations by political reporters and pundits.

While these findings are both interesting and important, we would be remiss not to discuss their limitations. First, this study covers just the state of Ohio. While Ohio is a microcosm of the nation in some ways (African American population, median household income), it differs in others (such as Latino population) (United States Census Bureau, 2013). Second, even among other battleground states, Ohio received considerable attention from both parties in 2008 and 2012. For instance, there were more Obama field offices in Ohio in 2012 than in any other state; the only state with more Romney offices was Florida. In other words, the ground game was arguably more intense in the Buckeye State than any other. Given the costs of a field office in terms of money, staff, and volunteers, it simply may not be possible to replicate such intensity across every battleground state.

Furthermore, there were other elections occurring in Ohio in these years, including a contentious U.S. Senate in 2012 in which the incumbent, Sherrod Brown (D) defeated his challenger, John Mandel, by a wider margin than did President Obama. While political scientists often explore the impact of presidential elections on down ballot races (e.g., Campbell, 1986; Campbell & Sumners, 1990; Ferejohn & Calvert, 1984; Halberstam & Montagnes, 2015), there is little known about how Brown's popularity (or Mandel's weaknesses) may have affected the Obama-Romney election. Future research should explore such potential impacts of other high profile, statewide elections on presidential election results in local communities.

Another limitation to this study is the scope of the findings. While field office proximity can influence a candidate's share of the vote, it will not fundamentally alter the electoral context. Thus, while the McCain campaign received some criticism for eschewing a stronger ground game for a more wide-reaching television ad campaign, their decision was reasonable. Even with a robust ground game on par with then-Senator Obama, McCain was not going to overcome the structural headwinds faced in 2008. Our results, similar to Masket (2009) and Osborn et al (2010), indicate that the ground game makes a difference at the margins. In close elections, it can tip the balance in favor of one candidate over another, but it will only do so much.

There is a practical implication of these results as well. In an era of microtargeting and big data, presidential campaigns must be able to reach every potential voter. As such, this study provides validation for the idea that local community-based mobilization efforts are superior to a more regional approach. This also suggests that presidential candidates should adopt a similar strategy to the Obama campaigns to maximize their showing on Election Day. Rather than pick a handful of locations for their field offices, campaigns should make an effort to pay attention to the geographic location of their campaign efforts.

Finally, further studies should make an effort to explore quantity versus quality. Simply blanketing a state with field offices is likely not sufficient to affect the election results. There must be an element of quality associated with the ground game. Based on reports highlighted throughout this study, the Obama campaigns not only had a numerical advantage in field offices, but a qualitative one as well. Elections scholars need to find a way to quantify such advantages.

Figure 1: Presidential Campaign Results & Field Offices, 2008

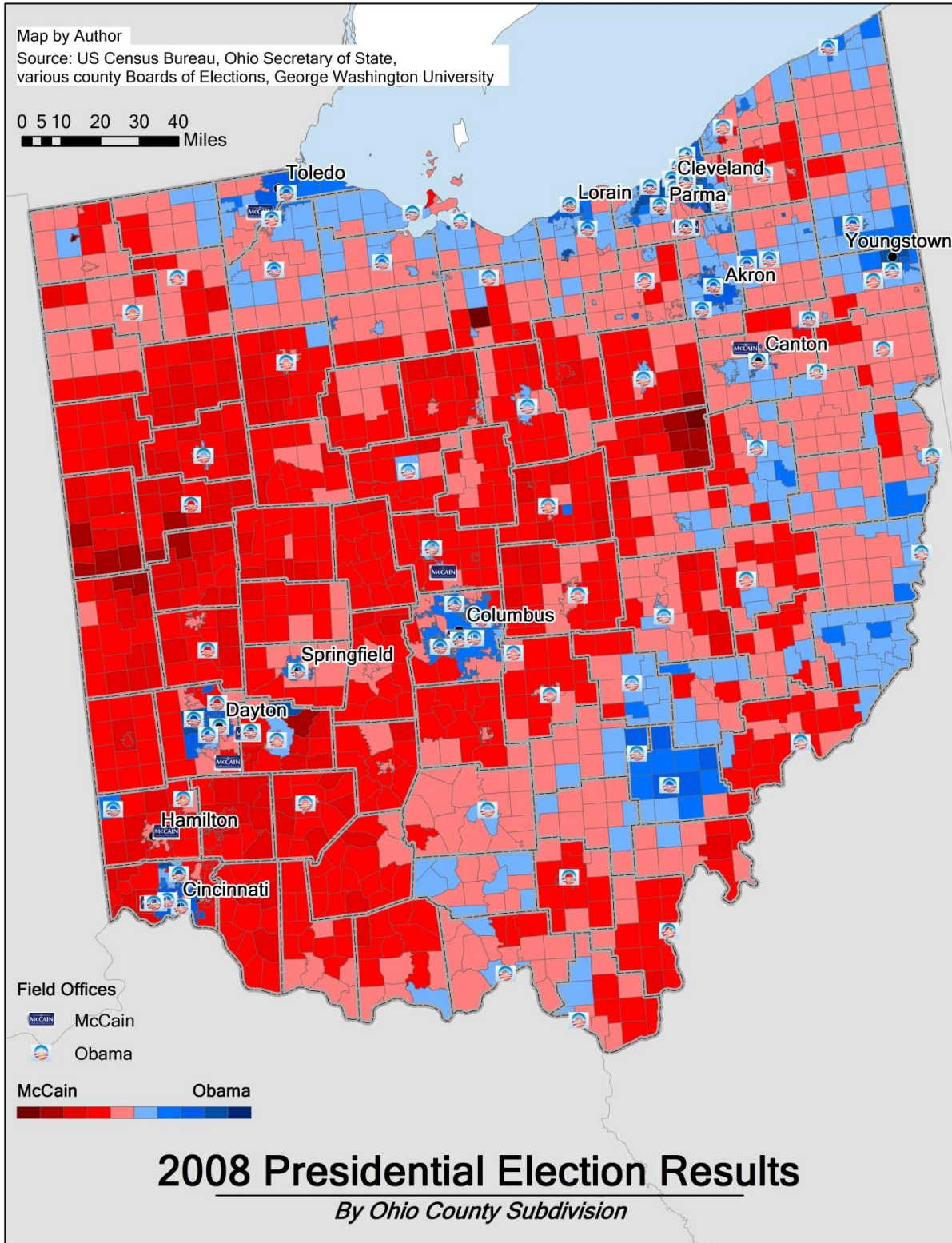


Figure 2: Presidential Campaign Results & Field Offices, 2012

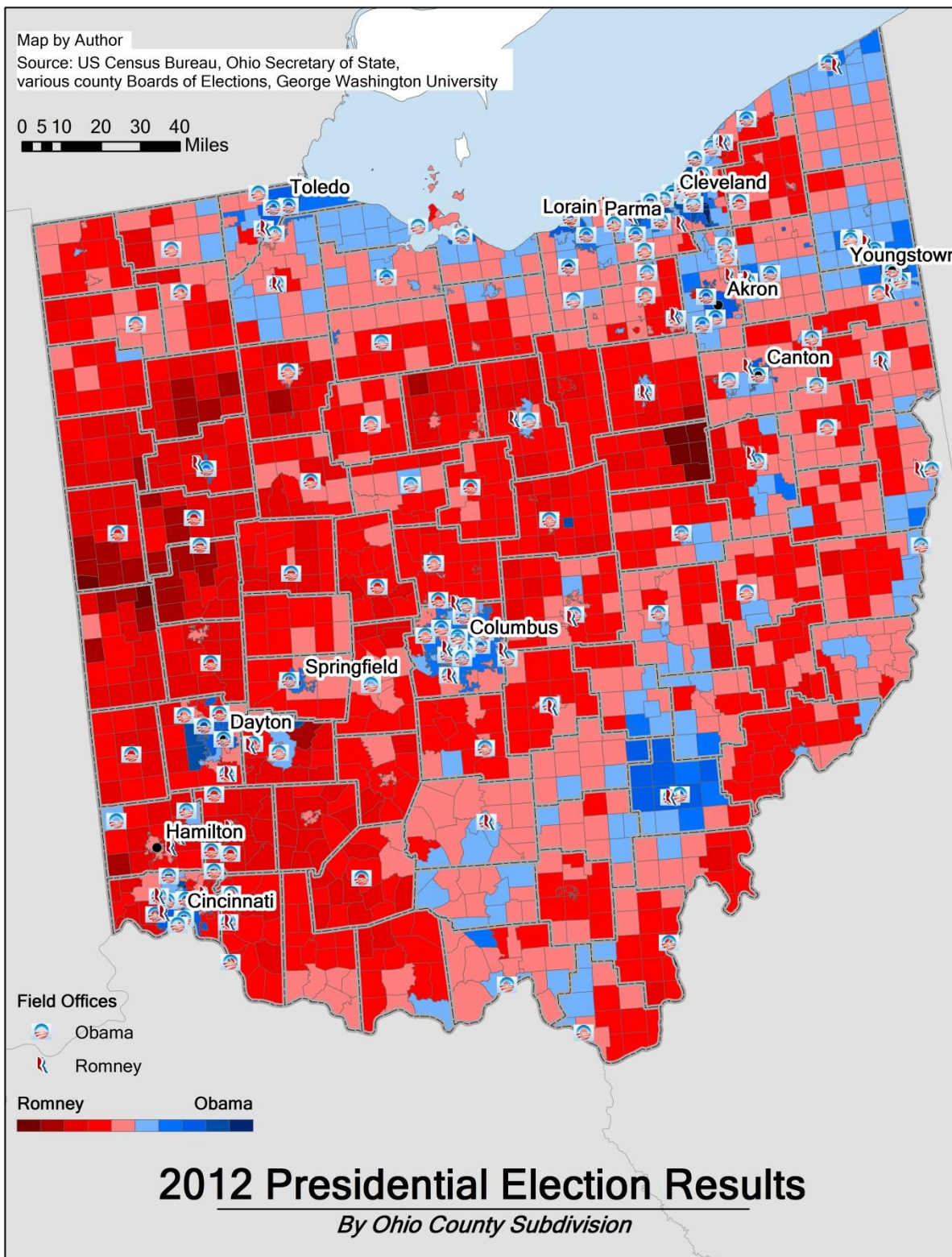


Table 1: Descriptive Statistics for Key Variables

Variable	Statistic					
	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Min.</i>	<i>Max.</i>	<i>Standard Deviation</i>
<i>DEM offices within 10 miles, 2012</i>	1,593	1.33	1	0	12	1.98
<i>GOP offices within 10 miles, 2012</i>	1,593	0.39	0	0	4	0.70
<i>DEM offices within 10 miles, 2008</i>	1,592	0.82	0	0	10	1.37
<i>GOP offices within 10 miles, 2008</i>	1,592	0.09	0	0	2	0.31
<i>DEM Vote Share, 2012</i>	1,585	41.58	40.26	5.57	99.58	12.97
<i>DEM Vote Share, 2008</i>	1,581	43.16	41.90	9.78	99.47	11.93
<i>DEM Vote Share, 2004</i>	1,576	40.33	38.96	6.44	95.87	12.40
<i>Voter Turnout, 2008</i>	1,580	70.22	70.95	34.44	85.01	6.64
<i>Voter Turnout, 2012</i>	1,585	68.94	69.63	31.26	95.94	7.23
<i>Population Density 2012</i>	1,585	521	95.65	4.03	9,394	1,011
<i>Population Density 2009</i>	1,581	525	98.22	1.43	9,269	1,028
<i>African American Percent, 2012</i>	1,595	3.64	0.80	0	99.3	9.54
<i>African American Percent, 2009</i>	1,593	3.33	0.70	0	94.4	8.97
<i>Latino Percent, 2012</i>	1,595	1.75	0.80	0	26.7	2.76
<i>Latino Percent, 2009</i>	1,593	1.53	0.60	0	34.3	2.77
<i>Senior Citizen Percent, 2012</i>	1,595	26.99	26.90	0	65	7.58
<i>Senior Citizen Percent, 2009</i>	1,593	26.16	25.10	0	81.8	7.59
<i>College Degree Percent, 2012</i>	1,595	11.69	9.80	0	100	8.36
<i>College Degree Percent, 2009</i>	1,593	11.06	9.00	0	100	8.25
<i>Unemployed Percent, 2012</i>	1,595	8.90	8.20	0	38.6	5.22
<i>Unemployed Percent, 2009</i>	1,593	7.25	6.60	0	38.1	4.53
<i>Median Household Income, 2012</i>	1,594	\$53,339	\$51,099	\$0	\$250k	\$19,049
<i>Median Household Income, 2009</i>	1,593	\$52,137	\$49,886	\$0	\$250k	\$18,961
<i>DEM Candidate Visits, 2012</i>	1,593	0.02	0	0	4	0.18
<i>DEM Candidate Visits, 2008</i>	1,593	0.02	0	0	3	0.18
<i>GOP Candidate Visits, 2012</i>	1,593	0.03	0	0	4	0.22
<i>GOP Candidate Visits, 2008</i>	1,593	0.03	0	0	4	0.22
<i>Total Candidate Visits, 2012</i>	1,593	0.05	0	0	6	0.35
<i>Total Candidate Visits, 2008</i>	1,593	0.05	0	0	6	0.35
<i>DEM Ads, 2012</i>	1,593	18,236	17,943	0	30,136	9,199
<i>DEM Ads, 2008</i>	1,593	9,475	10,446	333	12,642	3,410
<i>GOP Ads, 2012</i>	1,593	16,771	19,480	0	24,276	7,656
<i>GOP Ads, 2008</i>	1,593	7,492	8,246	1,392	9,487	2,392
<i>Total Ads, 2012</i>	1,593	35,006	37,423	0	54,412	16,677
<i>Total Ads, 2008</i>	1,593	16,967	18,710	2,151	22,129	5,686

Table 2: Spatial Autocorrelation Diagnostics

Diagnostic	Models			
	<i>2008 Vote Share</i>	<i>2012 Vote Share</i>	<i>2008 Turnout</i>	<i>2012 Turnout</i>
<i>Moran's I</i>	26.05	31.62	39.79	23.44
<i>AIC - OLS</i>	8,859	8,491	-5,428	-6,035
<i>AIC - Spatial</i>	8,52	8,055	-6,053	-6,323
<i>R² - OLS</i>	0.89	0.93	0.59	0.76
<i>R² - Spatial</i>	0.92	0.95	0.74	0.81
<i>N</i>	1,580	1,585	1,580	1,585

Dependent variables: Democratic candidate's share of the two-party vote in 2008 and 2012; Democratic candidate's change in performance from 2004 to 2008 and 2008 to 2012.

Explanatory variables: X and Y county subdivision centroid coordinates, X and Y coordinates squared, and X*Y.

AIC statistics provided for full OLS model.

Bolded text indicate statistical significance at the $p < 0.001$ level.

Table 3: Effects of Field Offices on Vote Share, 2008-2012

Variables	Models	
	2008	2012
<i>Field Offices</i>		
Democrat	0.08 (0.13)	0.19* (0.09)
GOP	-0.74* (0.44)	0.22 (0.22)
<i>Controls</i>		
Pop. density	0.10*** (0.13)	0.35** (0.12)
African American	0.20*** (0.01)	0.05*** (0.01)
Latino	0.15*** (0.04)	0.12*** (0.03)
Senior Citizen	0.00 (0.01)	0.01 (0.01)
College Degree	0.09*** (0.02)	-0.04** (0.02)
Unemployed	0.08*** (0.02)	0.02 (0.02)
Median Household Income	-0.02** (0.01)	-0.03*** (0.01)
Dem Visits	0.76 (0.53)	-0.30 (0.39)
GOP Visits	-0.19 (0.44)	-0.33 (0.39)
Dem Ads	0.33* (0.14)	-0.09 (0.09)
GOP Ads	-0.18 (0.44)	0.11 (0.09)
Dem percent _{t-1}	0.70*** (0.01)	0.81*** (0.01)
<i>Other</i>		
Constant	11.29*** (1.01)	8.47*** (1.53)
Lambda	0.76*** (0.03)	0.74*** (0.03)
R ²	0.92	0.95
AIC	8,502	8,055
N	1,580	1,585

Population density, median household income, and ads are divided by 1,000. Standard errors are in parentheses. Lagged Democrat percent in the 2008 model is John Kerry's share of the vote from 2004; for 2012 it is Barack Obama's 2008 performance.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4: Effects of Field Offices on Voter Turnout, 2008-2012

Variables	Models	
	2008	2012
<i>Field Offices</i>		
Democrat	0.32** (0.13)	0.27** (0.10)
GOP	0.22 (0.45)	-0.14 (0.23)
<i>Controls</i>		
Pop. density	-0.58*** (0.13)	-0.17 (0.13)
African American	-0.02* (0.01)	0.05*** (0.01)
Latino	-0.06 (0.04)	-0.07* (0.03)
Senior Citizen	0.05*** (0.01)	0.03* (0.01)
College Degree	0.10*** (0.02)	0.03* (0.017)
Unemployed	-0.09*** (0.02)	-0.07*** (0.01)
Median Household Income	0.05*** (0.01)	0.04*** (0.01)
Total Candidate Visits	-0.44 (0.25)	-0.34 (0.23)
Total Ads	0.08* (0.03)	0.07 (0.11)
Turnout _{t-1}	51.01*** (1.58)	41.40*** (1.65)
<i>Other</i>		
Constant	27.98*** (1.47)	32.12*** (1.80)
Lambda	82.47*** (2.41)	73.37*** (3.13)
R ²	0.74	0.81
AIC	-6,053	-6,323
N	1,580	1,585

Population density, median household income, and ads are divided by 1,000. Standard errors are in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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Endnotes

¹ Of the eleven battleground states in 2008, the presence of a county field office was significant in only Florida, Indiana, and North Carolina. In Colorado, Iowa, Missouri, Nevada, New Mexico, Ohio, Pennsylvania, and Virginia, field offices were not a statistically significant factor.

² Information on the Obama/Biden 2012 offices comes from the campaign website, which lists the address of each field office (<http://www.barackobama.com>). Information on the Romney/Ryan field offices comes from their campaign website, which also lists the address of each field office (<http://mittromney.com>). Information on the location of the Obama/Biden 2008, McCain/Palin, and Kerry/Edwards offices comes from George Washington University's Democracy in Action websites (<http://www.gwu.edu/~action/2008/obama/obamaohfield.html>, <http://www.gwu.edu/~action/2008/mccain/mccaingenoh.html>, and <http://www.gwu.edu/~action/2004/kerry/kerrohcoord.html>). Unfortunately, specific addresses are not available for the six Bush/Cheney 2004 Victory Centers spread around the state.

³ The Cincinnati McCain office was nearly next-door to an Obama field office, and is difficult to see on the map. The same occurred with the Obama and McCain offices in Brecksville, a Cleveland suburb in south-central Cuyahoga County.

⁴ For 2008, we use the 2005-2009 5-year ACS data as this is the first 5-year increment available. For 2012, we use the 2008-2012 5-year ACS data. ACS data can be accessed at <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁵ AIC is founded in information theory and measures the amount of information lost. A lower AIC indicates less information loss. The AIC value is: $AIC = 2k - 2 \ln(L)$, where k is the number of parameters in the model, and L is the maximized value of the likelihood function for the model. See Akaike (1974) for more information.