It is possible our findings regarding turnout may simply reflect an idiosyncratic “Obama effect” of the 2008 elections. The appeal of Obama could have led to greater turnout in counties with more young voters, large minority populations, or more Democratic voters. However, as Table 1 shows, our vote center counties are matched with control counties that are very similar in these measures. Any “Obama effect” on turnout should have hit both county groups fairly evenly.

Similarly, the turnout effect may simply be a transitory spike associated with the novelty of the introduction of a convenience measure. While such a spike could not be driven by early voting which was already in place in the 2004 election, the vote center effect may not be persistent in the long-term. In the absence of data that cover the year with or more election cycles, it is difficult to discount this possibility. Certainly, future elections will tell whether these turnout effects are persistent. In the meantime, these initial findings speak to the need to keep the debate about vote centers and early voting open, especially given the stakes in county election boards.

If, as Hypothesis 3 suggests, vote centers help increase turnout by drawing reluctant voters rather than simply serving those who would vote anyway, we should observe increases in participation by these types of voters between 2004 and 2008. To test this hypothesis, we use the county level individual vote history data to divide the voters into three groups based on the frequency of their voting. New voters are, as one might expect, those who regardless of their age have not voted in any prior election. This categorization, of course, conflates the chronic non-voter with the young voter. However, below we stratify our analysis of this group by age in order to account for this issue. The second category consists of infrequent voters. To code this variable, we used the 2004 general election results to determine the 33rd percentile of the “times voted” variable for each of the age groupings. Any individual falling below that number is coded as infrequent, with the exception of new voters. As a result, because the first age range has a 33rd percentile value of one vote, there are no “infrequent” voters for that age range. Finally, we consider all remaining voters who are not either new or infrequent to be in a residual category that we label “regular.”

In Table 5, we compare the changes in vote totals from 2004 to 2008 between vote center and control counties. These differences are presented for groups based on age and voting frequencies. For each of these categories, vote center counties enjoyed greater infrequent voters turned out in greater volume in vote center counties. For all but one age group (18 to 24), these differences were greater for infrequent and new voters than for regular voters. These differences between vote center and control counties were statistically significant for the new and infrequent voters in each of the age brackets (with the exception of new voters, 18-24), but only one of the age groupings of regular voters (30-44). This suggests that vote centers increase turnout by increasing the convenience of voting for those otherwise easily dissuaded from doing so. The age breakdown of this effect in Table 5 underscores this inference, particularly given the large gains of vote center counties relative to the control counties among new and infrequent voters in the 30-44 and 45-64 age brackets. Potential voters in these age brackets are most likely to have families to care for and to be employed in full-time regular work. Hence, potential voters in this group are most likely to benefit from more flexible voting arrangements, such as vote centers near their work places and easy access to early voting in order to avoid election days lines.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Difference in group means between vote center and control counties (VC – C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Voters</td>
</tr>
<tr>
<td>18-29</td>
<td>.255</td>
</tr>
<tr>
<td>30-44</td>
<td>.319**</td>
</tr>
<tr>
<td>45-64</td>
<td>.303***</td>
</tr>
<tr>
<td>65+</td>
<td>.173**</td>
</tr>
<tr>
<td>Total</td>
<td>.246*</td>
</tr>
</tbody>
</table>

* p<.1, **p<.05, *** p<.01, one-tailed

The Tippecanoe data allow a closer look at what is going on behind these numbers. As hypothesis three suggests, infrequent voters who turn out for elections will be drawn by the convenience of early voting at vote centers. This means a large percentage of the infrequent voters who did not vote in 2004 should be observed not just voting, but voting early in 2008 if convenience indeed motivates them.

5 The cutoff number of votes (at or below which a voter is considered infrequent) for each group are as follows: 18-29, one vote; 30-44, two votes; 45-64, four votes; 65+, eight votes.
Indeed, this is what our voting history data shows. In Table 6, we show the level of early voting among infrequent voters between 2004 and 2008 election by age group. In the fifth column, we display the number of infrequent voters who did not vote in 2004 but voted early in 2008; overall, 3170 such vote were cast. This is equivalent to 86% of the overall increase in votes by infrequent voters (regardless of age) for Tippecanoe County in the 2008 election.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>30-44</td>
<td>1148</td>
<td>1996</td>
<td>848</td>
<td>621</td>
<td>73.2</td>
</tr>
<tr>
<td>45-64</td>
<td>2204</td>
<td>3148</td>
<td>944</td>
<td>810</td>
<td>85.8</td>
</tr>
<tr>
<td>65+</td>
<td>5831</td>
<td>7690</td>
<td>1859</td>
<td>1739</td>
<td>93.5</td>
</tr>
<tr>
<td>All Ages</td>
<td>9183</td>
<td>12834</td>
<td>3651</td>
<td>3170</td>
<td>86.8</td>
</tr>
</tbody>
</table>

In Table 7, we summarize the voting method of each type of voter for those who did not vote in 2004. The table presents compelling evidence that early voting was particularly attractive to infrequent voters. Of the voters who did not vote in 2004 but turned out in 2008, the infrequent group voted early in the highest percentage. This suggests the need for further examination of the contention that convenience voting appeals to and serves only the politically engaged.

<table>
<thead>
<tr>
<th>Voter Type</th>
<th>Regular/absentee</th>
<th>Early</th>
<th>Total</th>
<th>Percent Early</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Voters</td>
<td>6061</td>
<td>4569</td>
<td>10630</td>
<td>43.0</td>
</tr>
<tr>
<td>Infrequent Voters</td>
<td>3110</td>
<td>3170</td>
<td>6280</td>
<td>50.5</td>
</tr>
<tr>
<td>Regular Voters</td>
<td>9260</td>
<td>5290</td>
<td>14550</td>
<td>36.4</td>
</tr>
</tbody>
</table>

To be sure, early voting is still predominantly done by regular voters. Table 8 shows only votes cast by those who did not vote 2004. A total of 33,527 citizens voted early in 2008, 21,692 (or 64%) of whom were regular voters. However, the data suggest that the difference between early and regular voters may indeed be narrower than is thought. Though Table 4 shows that the average early voter has three more prior votes than the average regular voter, the difference diminishes when voting histories are stratified by age. Controlling for age, early and regular voters have very similar prior participation. Consistent with Stein (1998), we find that older voters are more likely to vote early than younger voters; this may represent an information gap between inexperienced and experienced voters concerning the availability and use of early voting facilities. In Tippecanoe in 2008, new voters opted for early voting only 36.4% of the time as compared to 51.4% of those with prior voting records.

<table>
<thead>
<tr>
<th>Age range</th>
<th>Mean prior votes</th>
<th>Median prior votes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Early</td>
<td>Regular or Absentee</td>
</tr>
<tr>
<td>All ages</td>
<td>8.43</td>
<td>5.78</td>
</tr>
<tr>
<td>18-29</td>
<td>1.00</td>
<td>0.89</td>
</tr>
<tr>
<td>30-44</td>
<td>3.62</td>
<td>3.22</td>
</tr>
<tr>
<td>45-64</td>
<td>7.43</td>
<td>6.62</td>
</tr>
<tr>
<td>65+</td>
<td>13.14</td>
<td>12.20</td>
</tr>
</tbody>
</table>

6. The cost of convenience

Although our findings on turnout are preliminary in nature, they are all the more compelling from a policy perspective given that data suggest that the vote center model actually reduces election costs rather than increasing them. These data are drawn from Losco, Scheele, and Vasicko (2010). Measuring election costs is something of a complex process. Governmental accounting practices may vary substantially from county to county. The often used “cost per vote” statistics can be misleading as they are dependent in part on turnout and economies of scale associated with elections. However, election officials must provide polling services regardless of turnout and so face a large threshold of fixed costs when planning an election.
The Indiana experience indicates that vote center counties enjoyed substantial savings in costs they would have undertaken in traditional precinct elections. These savings came largely in three categories.

First, staffing costs constituted by far the largest area of reduced expenses for vote center counties. Operating fewer polling locations results in substantial reduction of personnel needed to operate and to monitor the election. Tippecanoe County officials used 96 full-time workers in the 2007 municipal election as compared to the 260 that traditional precincts would have required. Greater efficiency of staff use resulted in vote center workers serving on average 460 voters in the 2008 election while control county workers served on average 119. Increased early voting added to this efficiency, as staff not required to be present by statute could work shorter shifts as turnout demanded. The greater efficiency of staff use had a ripple effect through related cost categories, reducing set-up time, training costs, meal costs, and overtime.

The second major category of expense reduction is the long-term capital cost of voting machines. As each voting machine in the vote center model handles more ballots than under the precinct model, fewer machines are required, lowering the long-term capital costs of elections. Voting machines generally last ten elections so, of the six counties, only Cass happened to be buying new machines for the 2008 general election. Election officials there estimated that purchasing enough machines for a traditional precinct election would have required an additional $500,000 of expenditure. Assuming voting machines cost roughly $5,000 and that each machine has a usable life-span of ten years, each machine adds $500 to an election’s cost. Increasing machine utilization from 165 to 230 voters per machine means that a county expecting 100,000 voters on Election Day can reduce the number of voting machines it must own by 170, a savings of $85,000 per election. In addition to lowered capital outlay, counties would also save on transportation, storage, and maintenance.

The third major category where vote centers achieved cost savings was in rental fees for polling locations. In consolidating precincts, vote centers substantially reduce the number of facilities required for polling. Tippecanoe consolidated ninety-two precincts into twenty vote centers for the 2008 general election. The reduced number of locations means that voting can take place in public buildings at no cost to the county, rather than requiring the rental of commercial spaces. Although the savings from rental costs were smaller than staffing and voting machines, they were nonetheless notable. In the 2008 general election, neither Tippecanoe nor Cass needed to pay for rental facilities resulting in savings of $2400 and $1000 respectively, while Bartholomew County (which used traditional precincts) paid out $900 in rent.

Overall, the financial savings from consolidating precincts into vote centers proved to be substantial. To be sure, implementing the vote center model created some expenses that exceeded traditional precinct expenses (e.g., setting up high speed internet connections, etc.). But the data indicate net gains for the vote center counties. The 2007 municipal election cost Tippecanoe County $56,626 as compared to the estimate of $75,008 that a precinct election would have cost. With the experience of that election enhancing efficiency, Tippecanoe officials were able reap even greater savings in 2008 spending $99,851 on vote centers as compared to an estimated $142,658 for precinct voting. Cass County accrued similar savings spending $29,000 for its vote centers as compared to an estimated $59,800 for precinct voting. Quite clearly, vote centers did not constitute convenience for the engaged at the expense of the disenfranchised.

7. Conclusions
Our analysis is admittedly preliminary and our data are in some ways less than ideal. Nevertheless, our findings suggest that vote centers in combination with early voting have the potential to increase turnout and to attract infrequent voters by offering voting opportunities with greater flexibility in time and location. Further, we have shown that vote centers even when used in combination with early voting can result in substantial cost savings for election administrators, leading us to reject claims that vote centers constitute a transfer of state or county resources to the politically engaged. Because vote centers are a recent innovation lacking long-term turnout studies covering multiple election cycles, results of studies such as ours are not yet conclusive. However, we contend that these findings merit keeping the debate on vote centers and early voting open. In short, it is too early to close the books on early voting.

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6 These estimates are based upon discussions with County Clerks and vendors for voting systems.
References


When do we vote and does it matter that we all don’t vote together? As of 2007 voters in thirty-one states were able to vote in person up to three weeks before election day (Electionline 2007). In all fifty states mail-in absentee voting is available with few if any restrictions on who can exercise this electoral option. As a result, approximately one-fifth of all votes cast in the 2004 Presidential election were cast before election day (2004 Current Population Survey), and the proportion of votes cast before election day ranges from a low of less than 5 percent in ten states to over 40 percent in eight states (Gronke et al. 2007). These significant changes in how and when voters may cast their ballots raise critical questions regarding their consequences for democratic politics in the US. Does the opportunity to vote prior to election day increase voter turnout? Do individuals who cast their ballots before election day differ from individuals who vote on election day? Do the determinants of vote choice differ depending on when individuals cast their ballots? How have public officials, the public, and the press responded to these new opportunities to vote?

Our review of literature pertaining to these questions focuses on what we know and what we do not know about voting early. We refer to absentee voting, mail-in
EARLY, ABSENTEE, AND MAIL-IN VOTING

A BRIEF HISTORY OF EARLY VOTING

Opportunities to vote before election day are not new to the American electoral process. Voters have long had the opportunity to vote before election day by casting an absentee ballot, normally by mail (see Bensel 2004). In the past, states limited this form of early voting to individuals who were unable for reasons of travel or disability to vote on election day at a voting place in their voting jurisdiction. The significant rise in number of votes cast before election day begins with the adoption of in-person early voting in Texas in 1988.

In-person early voting differs from absentee voting in that voters may ballot at one or more satellite voting locations, and cast a vote in person without offering an excuse for not being able to vote on election day (Gronke and Toffey 2008; Stein and Garcia-Monet 1997). Satellite voting locations vary by state, and may include government facilities as well as non-traditional locations such as grocery stores, shopping malls, schools, libraries, and other locations. Early voting generally is conducted on the same voting equipment used on election day, as opposed to vote by mail, which is conducted on paper ballots. The time period for early voting varies from state to state, but most often it is available during a period of ten to fourteen days before the election, generally ending on the Friday or Saturday immediately preceding the election. More than half the states (thirty-one), offer some sort of in-person early voting including early in-person and mail-in absentee voting (Electionline 2007).

An important feature of in-person or satellite early voting is that a voter can ballot at any of a number of early voting places within the voting jurisdiction, usually a county. Because voters are not required to ballot at their residential precinct they are given a ballot appropriate to their residential location. This condition allows election administrators significant discretion in locating polling places at larger venues more centrally located to where voters work, shop, recreate, and travel. The larger venues also afford election administrators greater efficiencies in the use of their poll workers and polling equipment. These characteristics of
Early Voting and Voter Participation

The empirical expectation is that voter turnout will be higher in states with relaxed absentee voting and in-person early voting, ceteris paribus, than in states without these options for early voting. Who is most advantaged by the increased opportunities to ballot before election day is not obvious. Presumably the costs of voting (e.g., time) are a greater obstacle to those who are least able to bear these costs, i.e., the poor, uneducated, and politically disinterested. Conversely, we might expect that those who are best able to bear the costs of voting are also best positioned to take advantage of the added convenience of early voting opportunities.

In this way, convenience voting reforms such as early voting, relaxed absentee voting, and mail-in ballots are thought to lower the costs of voting and thereby increase turnout. By expanding opportunities to vote, the link between voting reforms and the costs of voting seem clear. However, the link between the costs of voting and levels of participation as suggested by the Downs (1957) model of turnout might be more problematic as it under-predicts levels of turnout (Fiorina 1990). This is potentially problematic for research on election reforms that primarily rely on the connection between the costs of voting and levels of voter turnout.

However, recent refinements to the Downsian model of turnout suggest rates that are consistent with observed levels of turnout (Bendor, Collins, and Kumar

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1 Washington and Colorado allow all-mail balloting in non-federal elections as requested by county election officials.
EARLY, ABSENTEE, AND MAIL-IN VOTING

Early, absentee, and mail-in voting (2006; Bendor, Diermeier, and Ting 2003; Fowler 2006). Specifically, these models argue that while voters are responsive to the costs and benefits of voting they do not necessarily have full information about those costs. Rather, voters are argued to learn about the costs and benefits of voting over time such that they condition their present and future behavior on their past experiences. In that way, an individual who has had better past experiences voting is more likely to vote in future elections than an individual who has had less positive experiences.

Theoretical models that incorporate a learning mechanism have suggested rates of turnout that are consistent with observed aggregate levels of turnout (Bendor, Collins, and Kumar 2006; Bendor, Diermeier, and Ting 2003). Others have specified different learning mechanisms which also produce predictions that are consistent with observed levels of turnout at the individual and aggregate levels (Fowler 2006). Empirical work on how voting is habit-forming additionally seems to suggest that individuals may rely on a learning mechanism for determining the likely costs and benefits of voting when deciding whether or not to vote (Gerber, Green, and Shachar 2003; Plutzer 2002).

These theoretical refinements to the Downsian model of turnout seem to have at least three important implications for the study of election reforms. The first is that it helps to establish a stronger theoretical rationale for the effects of election reforms on turnout. Second, it suggests that election reforms might have a greater long-term effect such that the full effect might not be immediately realized. And third, we might additionally expect voters to settle into a particular mode of voting. That is, theoretical models might suggest that voting is not only habit-forming generally, but voters might also stay with a particular mode of voting (e.g., early, absentee) across elections.

Liberalized voting by mail (Berinsky, Burns, and Traugott 2001) and in-person early voting (Gronke, Galanes-Rosenbaum, and Miller 2007; Karp and Banducci 2000, 2003; Kousser and Mullin 2007; Neeley and Richardson 2001; Stein 1998; Stein and Garcia-Monet 1997) were found to have an insignificant or marginal effect on increasing the likelihood an individual will vote. Neeley and Richardson report "that early voting merely conveniences those who would have voted anyway" (2001, 381). Stein (1998) reports that voter turnout among resource-poor voters does not benefit from the adoption of in-person early voting. More importantly, early voters are disproportionately likely to have voted in the past (Hanmer and Traugott 2004; Southwell and Burchett 2000). Southwell and Burchett offer a dissent from this finding, for voting by mail. Studying voter turnout in forty-eight Oregon elections, "all-mail elections increased registered voter turnout by 10% over the expected turnout in a traditional polling place election" (2000, 76)—although others have reported the effect of vote by mail in Oregon to be about 4.7 percent (Gronke, Galanes-Rosenbaum, and Miller 2007).

The effects of vote-by-mail might also vary by the type of election. While studies have found that the effects of vote-by-mail are generally not substantial, Magleby
Robert M. Stein & Greg Vonnahme

(1987) reports that mail ballots in local elections led to an increase in turnout of around 19 percent in San Diego, California and Portland, Oregon. Analyzing data from Oregon between 1986 and 2000, Karp and Banducci (2000) also report variation in the effects of mail-in ballots by the type of election as local elections show the greatest effect, with an increase of 26.5 percent, while midterm elections actually show a decrease of 2.9 percent. These findings suggest that vote-by-mail might have the greatest effect for the less salient and less publicized elections. That vote-by-mail might be particularly effective at increasing turnout in local elections is consistent with findings also reported by Hamilton (1988).

Others have also reported varying effects of vote-by-mail. Using a unique opportunity to study the effects of early voting, Kousser and Mullin (2007) also report that vote-by-mail seems to increase turnout in local elections but not national elections. Kousser and Mulling analyze data on California elections, wherein precincts with less than 250 people use mail-in ballots while larger precincts use traditional polling locations in the same election. This might provide greater control for potentially confounding variables and more reliable estimates of the causal effect of vote-by-mail on turnout. Kousser and Mullin report that vote by mail seems to decrease turnout by around 2 percent in national general elections and increases turnout by about 7.6 percent in local elections.

Berinsky, Burns, and Michael Traugott find that "contrary to the expectations of many reformers VBM [voting by mail] advantages the resource-rich by keeping them in the electorate and VBM does little to change the behavior of the resource-poor" (2001, 178). Simply put, electoral reforms have only been used by those who otherwise would have been most likely to vote without them. Berinsky, Burns, and Traugott (2001), Karp and Banducci (2000, 2001), Southwell (2000), Southwell and Burchett (2000), and Stein (1998) find that early voters are more likely to have strong partisan and ideological preferences, to be more attentive and interested in politics, wealthier, and older. Curiously, early voters are not significantly different than election-day voters on most socio-demographic variables, including race/ethnicity and education. Most importantly, scholars have failed to identify a significant partisan or candidate bias between early and election-day voters.

Convenience is more influential to the infrequent voter's decision to vote. For the frequent voter convenience influences when they vote (election day or before). Since non-habitual voters are less likely to vote, early or on election day, convenience may have a significant and positive effect on their decision to vote, before or on election day. The extant literature provides supports for this position. As discussed, the literature (Berinsky 2005; Berinsky, Burns, and Traugott 2001; Stein 1998) shows that early voters are significantly more partisan, ideological, interested in politics, and more likely to have voted in past elections. Most importantly, early voters

2 Kousser and Mullin also use a matching procedure to further account for imbalances in the data.
voters are more likely than election-day voters to make their vote choice before election day. We suspect this is the reason why convenience voting before election day (i.e., in-person early voting, mail-in ballots, and mail-in absentee voting) does not entice infrequent voters to ballot before election day.

One reason why early voting has not significantly increased voter participation may be the absence of an effective means and agent for implementing early voting. Those who administer and conduct elections, county-level election administrators, have little incentive and fewer resources with which to harness early voting opportunities into increased voter participation. The more likely agents for converting early voting opportunities into voter turnout are political parties and their contesting candidates. Political parties and candidates have an incentive to employ early voting as part of their electoral campaigns if these actions enhance their chances of winning election. There is empirical evidence to support this hypothesis.

Examining absentee voting in California and Iowa, Patterson and Caldeira (1985) provide systematic evidence for the varying effects of electoral reforms on voter turnout. Consistent with other literature on electoral reforms, they find that the proportion of votes cast by mail is correlated with the demographic characteristics associated with election-day balloting (e.g., age, income, and urban residence). Similar relationships between absentee voting and demographic characteristics have been reported by others but age seems to be the most consistent, with conflicting findings for race, income, education, and partisanship (Barreto et al. 2006; Dubin and Kaslow 1996). The most striking finding, however, was that the correlates of absentee voting varied across elections and between states. More specifically, Patterson and Caldeira report that “the state in which one party mounted a substantial effort had a higher rate of absentee voting” (1985, 785). This finding suggests that the effect early voting may have on voter turnout is dependent on a mediating condition, the campaign activities of political candidates and parties.

The cumulative evidence to date suggests that early voting has made voting more convenient for engaged and frequent voters while doing little to enhance the likelihood that infrequent voters will ballot before election day. There is, however, some evidence that several attributes of early voting, (e.g., being able to vote at any voting place in the jurisdiction, larger number of voting machines, parking, voting places that are centrally located to where voters work, shop, and recreate, and more qualified poll workers) are more stimulative of election-day voting among infrequent voters. This of course suggests that the turnout effect of early voting is wasted on early voters but has a significant and positive effect on the likelihood that infrequent voters will ballot on election day. We return to this finding and its implications for new research later in the chapter.
There is both anecdotal and empirical evidence that early voting has significantly changed the way candidates and parties conduct their campaigns. One Republican pollster aptly described the effect: “You need to divide the electorate into two groups. Run one campaign at early voters and another at Election Day voters” (Nordlinger 2003). Supportive of this assessment is the rise in the number of votes cast before election day. Common to all campaigns are efforts to bring voters to the polls on election day. These get out the vote (GOTV) activities are expensive in terms of both labor and capital. Before the adoption of early voting GOTV activities were concentrated on the weekend before election day. Every day of early voting, however, is an occasion for GOTV activities, significantly increasing campaign costs. One Democratic consultant estimated that early voting has increased the cost of campaigns by 25 percent (Nordlinger 2003).

Surveying county party chairs in Texas, Leighley (2001) and Stein, Leighley, and Owens (2003) confirm that both parties took significant steps to mobilize their supporters through early voting opportunities in their respective counties. Moreover, the incidence with which leaders in each party have used early voting to mobilize their base has increased over time. Leighley’s 1995 survey of county party chairs found that 42 percent of county party chairs reported using early voting as part of their campaign strategies to mobilize partisan supporters (i.e., provide voters with transportation to the polls during early voting). Democratic county chairs (55 percent) were significantly more likely to report using early voting as part of their campaign strategies than their Republican counterparts (32 percent).

Stein et al. (2003) find that when Democratic mobilization activities are matched with significant opportunities to vote early (i.e., a great number of sites and days of early voting) there is a significant increase in the likelihood that partisan supporters will ballot. Moreover, Texas Democrats were rewarded at the ballot box in 1992 when their mobilization efforts were matched with greater opportunities to vote at non-traditional voting places including convenience stores and shopping malls (Stein and García-Monet 1997). These findings are consistent with and partially explain the weak relationship between early voting and voter turnout, especially among infrequent voters. In addition to significant opportunities to vote early at places where voters are likely to be located, there must also be a partisan effort to use early voting to mobilize likely party supporters before early voting will have a positive effect on turnout. Here, however, the beneficiaries of early voting are both strong partisans and likely voters.

As discussed earlier, Patterson and Calderia (1985) also suggest that absentee voting and its impact on turnout and performance are sensitive to partisan efforts
to mobilize mail-in ballots. Absentee voting increases when political parties identify likely absentee voters among their supporters and work to turn out these persons for absentee voting. Absent any effort on the part of political parties to mobilize absentee voting among their partisan supporters, the effect of mail-in balloting on voter turnout is expected to be negligible.

Oliver's (1996) multi-state study of absentee voting tests Patterson and Caldeira's partisan mobilization hypothesis of absentee voting. Oliver finds that in states where absentee voting requirements are most liberal and where political parties invest time and resources to mobilize absentee voters, "the levels of absentee voting rise and the characteristics of absentee voters change" (1996, 510). The most important by-product of absentee voting and liberalized absentee voting "has come from the greater mobilizing campaigns of the Republican party" (1996, 511). Curiously, Democratic candidates do not benefit from increased liberalization of absentee voting and Democratic efforts to mobilize absentee voting. This might suggest that Democratic candidates confront a different set of obstacles when mobilizing their supporters, leading Democrats to rely on early voting and other electoral reforms when mobilizing their partisans.

Together, the findings of Leighley, Stein et al., Patterson and Caldeira, and Oliver suggest that the relationship between electoral reform, social-demographic factors (i.e., target populations of voters), and electoral participation may be mediated by partisan campaign activity. Candidates and their parties are expected to know who their supporters are, the likelihood that they will ballot in an election, the costs of mobilizing these supporters, and the probable impact voter mobilization will have on the outcome of an election. These findings suggest that parties and candidates have an important role in catalyzing the effects of election reforms.

EARLY VOTING, DISTRIBUTION OF POLITICAL INFORMATION, AND THE DETERMINANTS OF VOTE CHOICE

To what extent do voters who ballot early miss late-breaking campaign activities that could be decisive to their candidate choices? To what extent are early voters simply individuals who have made their vote choices early; strong partisans uninfluenced by campaign messages and political news; inattentive to political news?

Using data on California similar to the Kousser and Mullin (2007) study, Meredith and Malhotra (2008) examine the effects of mail-in ballots on the information
that individuals have to make their vote choice. Specifically, they analyze votes cast for presidential candidates in California's primary election in 2008, focusing on John Edwards, Fred Thompson, and Rudy Giuliani. They focus on these candidates because they withdrew from the race prior to election day. Meredith and Malhotra (2008) report results which suggest that a number of voters missed important information by voting by mail. Specifically they estimate that between 40 and 50 percent of Edwards voters and 20–30 percent of Giuliani and Thompson voters would have voted differently had they not voted by mail (Meredith and Malhotra 2008, 18).

As discussed above, Stein (1998), Neeley and Richardson (2001), and Berinsky, Burns, and Traugott (2001) report that early voters are significantly more interested in and attentive to politics than election-day voters. This finding has led several researchers to hypothesize that the determinants of vote choice might significantly vary by when a voter casts their ballot. More specifically, Stein, Leighley, and Owens (2003) hypothesize that early voters will rely more on their partisan affiliation and ideological preferences than election-day voters when choosing among contending candidates. The candidate choices of early voters pre-date the active period of a political campaign. Though early voters are highly attentive to and knowledgeable about politics, candidate issue positions, and candidate traits, Stein et al. hypothesize that these factors are not as influential as partisanship in the choices of early voters. Like the strong partisans and ideologues they are, early voters believe their party's nominees share their own values and issue positions. The adage "I am Democrat (Republican) don't confuse me with the facts," is an apt description of how early voters choose their candidates.5

In contrast, Stein et al. reason that election-day voters rely more on candidate evaluations and less on partisan affiliation and ideology when choosing between contending candidates. Even among strong partisans, the expectation is that party affiliation of election-day voters will exert less influence on their vote choices than other attitudes and beliefs. Unlike early voters, election-day voters are less likely to rely only on their partisan affiliation in making their electoral choices. Election-day voters may also be less attentive and knowledgeable about politics than early voters, as indicated in previous research, and rely more on their limited information about the candidates and issues when making their vote decision. There is some evidence that practitioners of political campaigns believe in the veracity of these hypotheses. One Republican campaign consultant offered the following description of how early voting influences his campaign strategy. "By concentrating on solidifying the base early, I can bank these [early] voters and concentrate on debating issues of concern to swing voters at the end [of the election]" (Nordlinger 2003, 3).

5 This observation is not intended to be a disparaging comment on partisan voting. As Downs (1957) has demonstrated, a reliance on party identification as a cue for voting is rational, efficient, and highly effective (i.e., choosing a candidate closest to the voter's own preferences).
Stein et al. (2003) report modest but statistically significant support for their hypotheses. Studying the 2002 Texas gubernatorial and senatorial elections, the authors find that party identification and ideology have greater impacts on early voters than on election-day voters’ choices among contesting gubernatorial candidates. The same finding, however, does not hold for voting in the 2002 Texas senatorial election. These findings are at best suggestive of what researchers might find as the number of ballots cast before election day increases. If campaigns influence how electoral rules are implemented, we might expect that in time candidates and their parties follow the advice of one consultant and differentiate their campaign messages between early and election-day voters. Given the recent adoption of early voting in many states, it may take longer than a few election cycles before we observe this effect.

LESSONS LEARNED FROM EARLY VOTING AND NEW ELECTION REFORMS

One of the most significant disappointments with these reforms is that the balance of evidence suggests a general failure to significantly increase voter participation, especially among those least likely to vote. In spite of this consensus finding, there are significant lessons from the experience of early voting that can inform how we organize and conduct elections in ways that may also stimulate participation among infrequent voters. New research suggests that effects of early voting may be related to the location of voting places as well as the number of days before election day voters are allowed to cast their ballot.

What would happen if infrequent voters were afforded the convenience of early voting on election day? Accessible parking, short waiting lines to vote, and an abundance of election-day workers to assist voters with balloting on electronic voting machines might be a strong incentive for infrequent voters to vote on election day. Again, there is supporting empirical evidence to suggest that the corresponding costs of voting have a significant negative impact on the likelihood of voting.

Gimpel and Schuknecht (2003) find that the geographic accessibility of polling places has a significant and independent effect on the likelihood that individuals will vote: “even after controlling for variables that account for the motivation, information and resource levels of local precinct populations, we find that accessibility does make a significant difference to turnout” (2003, 471). Dyck and Gimpel (2005) extend this same finding for election-day voting to the likelihood that
individuals will cast an absentee ballot by mail, or vote at an in-person early-voting polling place.

Haspel and Knotts (2005) report that voting is extremely sensitive to distance between the voter’s residence and polling place. They find “small differences in distance from the polls can have a significant impact on voter turnout” (2005, 560). Moreover, Haspel and Knotts find that turnout increases after moving a voter’s polling place closer to their residence. The authors explain that “it appears that the gain in turnout that accrues from splitting precincts outweigh the loss due to any confusion over the location of the polling place” (2005, 569), in part because distance from the new polling place was reduced.

Brady and McNulty’s (2004) study of Los Angeles County’s precinct consolidation in 2003 confirms Haspel and Knotts finding. “The change in polling place location has two effects: a transportation effect resulting from the change in distance to the polling place and a disruption effect resulting from the information required to find a new polling place” (Brady and McNulty 2004, 40). These two effects are roughly equal for the voter who had experienced an increase of one mile between their home and voting place.

Stein and Garcia-Monet (1997) similarly find that the incidence of early voting is sensitive to the location of early-voting polling places. The proportion of votes cast early was significantly greater at non-traditional locations (e.g., grocery and convenience stores, shopping malls, and mobile voting places) than traditional locations like government buildings and schools. The logic underlying this finding is simple; voters are more likely to frequent stores and other commercial locations than schools and government facilities.

Together these findings suggest that the convenience and accessibility of a voter’s election-day voting place is a significant incentive to voting. If this assessment is true, could election-day balloting be organized and administered to enhance voter turnout especially among infrequent voters? The popularity of early voting (Southwell and Burchett 2000) and other forms of convenience voting (i.e., voting by mail) suggests that many voters prefer the ease afforded by early voting, i.e., accessible voting locations, short lines, and assistance in using new or unfamiliar voting technologies. There is some reason to believe that voter turnout might marginally increase if we imported these “conveniences” to election-day balloting, especially for infrequent voters.

A recent innovation adopted in Colorado, Indiana, and Texas involves replacing traditional precinct-based voting places with election-day vote centers. Election-day vote centers are non-precinct-based locations for voting on election day. The sites are fewer in number than precinct-based voting stations, centrally located to major population centers (rather than distributed among many residential locations), and rely on county-wide voter registration databases accessed by electronic voting machines. Voters in the county are provided ballots appropriate to their specific voting jurisdiction. Of course this mode of balloting is what early
voters are afforded before election day. It is thought (Stein and Vonnahme 2008) that the use of voting centers on election day will increase voter turnout by reducing the cost and/or inconvenience associated with voting at traditional precinct locations for election-day voters. Unlike those who vote early, election-day voters are less partisan, ideological, and interested in politics. Consequently they may be more susceptible to the convenience of election-day vote centers.

Conceptually, there are two features of vote centers that separate them from precinct-based polling locations that might also be useful in understanding how early voting affects voter turnout. The first characteristic is whether the polling sites are open to all voters in the county or exclusive to a certain precinct (or combined precincts). The second is centralization, where polling locations are larger and more centrally located. Previous research argues that there may be a number of theoretical connections between these characteristics and voter turnout. There is also some empirical evidence which suggests that vote centers might increase turnout, particularly among less engaged voters (Stein and Vonnahme 2008).

### Directions for Future Research

There are a number of possible directions for future research. As mentioned above, future research on election reforms might pick up from more basic research on models of voter turnout. Specifically, behavioral models of turnout that incorporate a learning mechanism into Downs’s classical model of turnout not only provide a stronger theoretical basis for the immediate effect of election reforms on turnout but might also suggest other effects.

Specifically, if voters are thought to learn about the costs and benefits of voting over time, the full effect of election reforms might not be realized when the reform is first implemented. Rather, it might take several elections for voters to gain information about the ease of voting with convenience voting reforms. This raises at least two additional questions. The first is how long it would take to realize the full effect of reform, which would be affected by how many individuals initially consider alternative modes of voting. The second is how quickly the learning process is thought to take place.

Theoretical models of turnout might also suggest that voters will stick with a particular mode of voting. If a voter finds a particular mode of voting very convenient, the voter might tend to stay with it across elections. Previous empirical research suggests that voting is habit-forming (Gerber, Green, and Shachar 2003; Plutzer 2002) but insofar as voting encompasses a number of specific modes of