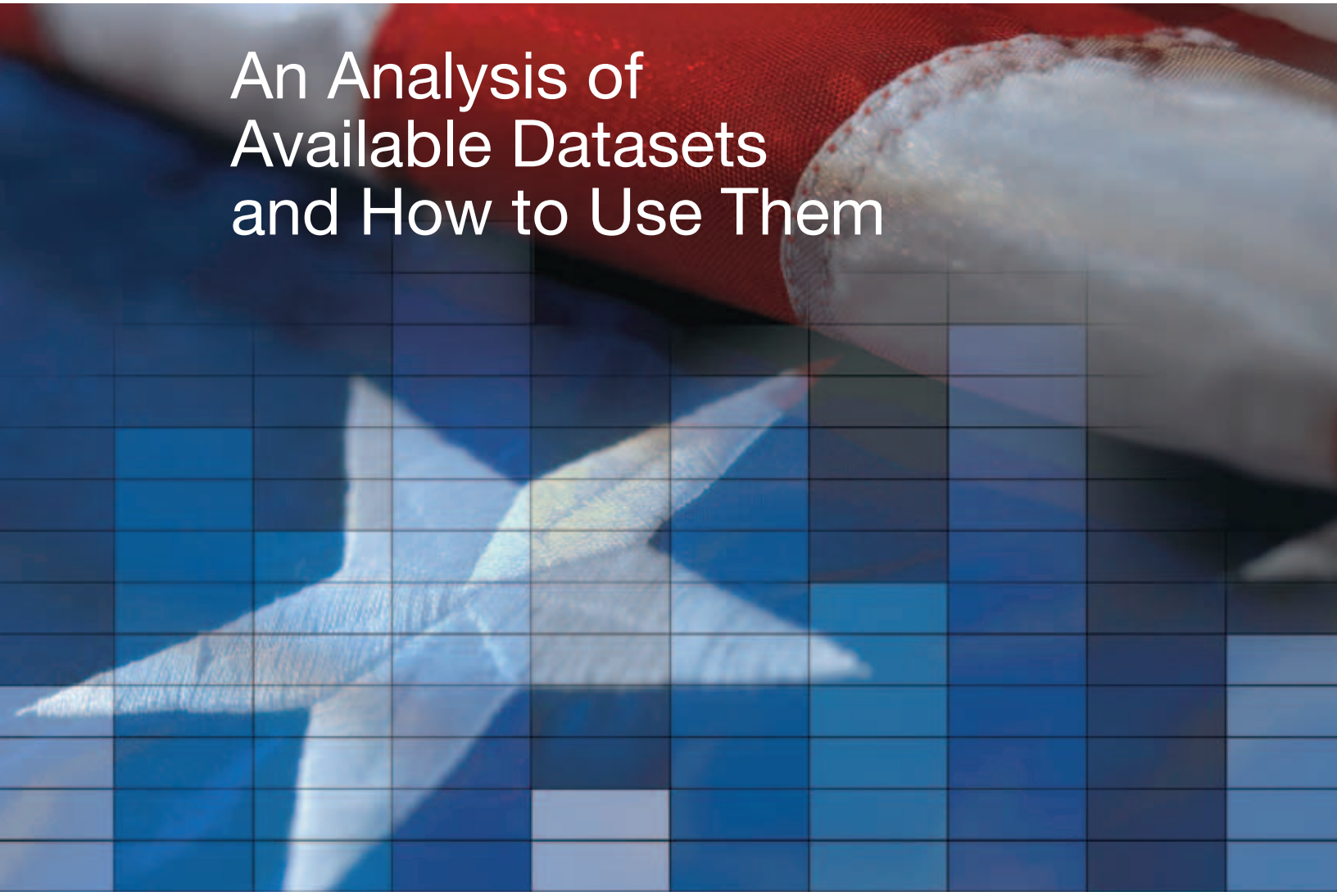
THE PEW CENTER ON THE STATES

Election Administration by the Numbers

An Analysis of Available Datasets and How to Use Them



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For additional information, visit www.pewcenteronthestates.org.

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Executive Summary

Administrators and policy makers are under more pressure than ever to conduct elections that are accurate, cost-effective and secure, and that bolster voter confidence in the results.

At the same time, they face fiscal constraints as federal funding provided under the Help America Vote Act (HAVA) dries up and state and local budgets are cut.

Every two years, stories appear in the media about problems in the election system based on particular incidents. Real improvements, however, must be grounded not in anecdotes, but accurate data from empirical research.

Officials responsible for election administration need reliable data that allow for:

- Identification of areas for improvement and spotting trends before problems become harder to address or the subject of public controversy.
- Comparisons within and between states on possible best practices that could be implemented, or inefficiencies or inequities to be remedied.
- Provision of accurate information for voters, legislators, journalists, advocacy organizations, and other stakeholders.
- Compliance with applicable laws to ensure they achieve the goals that made them necessary in the first place.

This is the first-ever report to analyze the completeness, strengths, weaknesses, and usefulness of data from sources such as state election divisions, the U.S. Census Bureau, the U.S. Election Assistance Commission and its Election Administration and Voting Survey (EAVS), public opinion surveys, and expert assessments.

This report finds that:

- Extensive data are available from the sources analyzed here.
- More effective use can be made of existing data.
- Election officials, legislators, academic researchers, advocacy groups, and other stakeholders should collaborate to improve the collection and use of data about elections nationally and in the states.

- The accuracy, completeness, and consistency of data, and even basic definitions of terms, vary considerably across states and localities. Although significant information is available now, better data and consistent definitions will help states continue to improve the effectiveness of election administration.

The Pew Center on the States has been working with state election officials, researchers, and other experts to develop measurements and tools to improve election performance. This report follows up on *Data for Democracy* (2008), which reviewed ways in which data could support better election management, from the local to the national level.[1]

At a time when states, counties, and municipalities face tighter budget constraints, Pew is committed to helping governments use both existing and improved data to make smart investments in election administration.

By strengthening data collection and using common terms, states will be able to build upon current efforts and better benchmark and evaluate how their election system is performing.

We welcome your advice and participation in our efforts to improve the performance of our elections for all Americans. For more information on Pew's Election Initiatives, please visit www.pewcenteronthestates.org/elections or contact:

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Introduction

The controversy surrounding the Florida vote count in the 2000 presidential election was perhaps the biggest single blow to confidence in the fairness and accuracy of elections in recent times. But few commentators have mentioned that the resulting national crisis might have been avoided if election officials had been making better use of data to identify and correct problems in their system.

Punch-card voting machines, like those used in Florida at the time, had a history of high error rates if they were poorly maintained. Had there been an effective program in place to systematically track errors in Palm Beach County and other counties, state and local officials could have identified the problem as it first developed and addressed it through better maintenance or improved technology.[2] A program to collect and monitor election performance data might have prevented the divisive national debate over handling hanging chad and other vote-count issues that seemed to determine the outcome of the presidential race.

This first-ever comprehensive survey and analysis of the current data that measure how elections are administered in the United States reviews several ways in which existing information can be used to improve the system and maintain voter confidence. This report looks at sources such as state election divisions, the U.S. Census Bureau, the U.S. Election Assistance Commission (EAC) and its Election Administration and Voting Survey (EAVS), public opinion surveys, and expert assessments—then analyzes the data for completeness, strengths, weaknesses, and usefulness.

Using these sources, it is possible to examine questions such as the following:

- Why is the average waiting time to cast a ballot more than an hour in one state and two minutes in another?
- Why were 84 percent of 2008 provisional ballots rejected in one state, while another rejected only 1 percent?

- Why were 43 percent of civilian absentee ballots in one state not returned for counting, while in another that occurred with 2 percent of those ballots?
- Why were 33 percent of 2008 military and overseas voters' ballots rejected by one state while another rejected 1 percent?
- Why did only 28 percent of U.S. voters in 2010 express confidence that votes across the country were being counted accurately, down from an already-low 48 percent in 2004?
- Why do a majority of voters in one state vote by absentee ballot while less than 1 percent do in another state—and what impact does that have on turnout?
- How have technological changes affected the residual vote rate (the number of votes for each race or measure vs. the number of ballots cast) since the 2000 election, and what does that say about the successes or problems of new voting methods?

This report is designed to promote further research and partnerships by showing how to use good, existing data to make elections in America run as well as possible. We welcome questions, discussion, and collaboration to achieve that goal.

Section 1: Datasets for Democracy identifies and analyzes the most important data in the field of election administration and policy.

Section 2: The National Picture explores how to use data to understand broad concepts that describe the state of our elections nationwide, examining registration and turnout rates as well as voters' opinions about the integrity of elections in their communities and across the nation.

Section 3: Measuring the Workflow of Elections illustrates how Election Assistance Commission data gathered from state and local officials can help highlight the large variations across the country in managing absentee voting and provisional ballots. This section also discusses the residual vote rate, a statistic derived from election returns that is widely used to measure the performance of voting machines.

An appended section on methodology and the accompanying tables analyze the completeness of these data and examine how some states have attempted to improve collection of information.

Section 1: Datasets for Democracy

Data available today allow a greater understanding than ever before about how elections are conducted. This section serves as an introductory guide to the most important sources for analyzing election administration and election policy in America:

- State election divisions
- The U.S. Census Bureau
- The U.S. Election Assistance Commission (EAC) and its Election Administration and Voting Survey (EAVS)
- Public opinion surveys
- Expert assessments

This section highlights each source's strong points, as well as limitations to be kept in mind as the data are used. To supplement this overview, more details about these datasets are provided in the appendices.

STATE ELECTION DIVISIONS

State election divisions report some of the most reliable data on how many people are registered and who voted—and availability of this information electronically has steadily improved. This can be seen in the significant increase in states reporting sufficient data to calculate the residual vote rate, which helps measure how voting machines performed. More states are reporting easy-to-download election statistics, broken down by county and precinct, which help citizens quickly assess election administration in those states or nationwide.

State Election Divisions

Statistics reported by election officials—returns and the number of registered voters—are one of the most reliable and useful forms of data on elections in the states. These data are critical for deciding how to deploy resources, such as voting machines and personnel, on Election Day and for spotting fraud.

Most state election offices post basic data on their Web sites. The thoroughness of the reporting varies according to state law and regulation, as well as the initiative taken by state officials to share data with the public. North Carolina's Board of Elections Web site stands out, as it provides electronic versions of data on statewide returns and turnout, broken down to the precinct level, along with electronic files that track the issuance and return of absentee ballots.[3]

In addition to basic registration statistics and election returns, some states collect other data that can improve our understanding of election administration. For instance, the North Dakota secretary of state has long gathered data about the cost of running elections in each county. Depending on how it is structured, each state's central voter file contains information that can be used, for example, to track the frequency of early and absentee voting by precinct or by racial groups.

Data that go beyond registration statistics and returns could paint a more accurate nationwide picture of election administration if states gathered them in a standardized way.

U.S. CENSUS BUREAU

The Census Bureau's Voting and Registration Supplement (VRS) provides a treasure trove of data on voting demographics, registration, reasons for not voting, and the modes used to cast a ballot. The dataset's consistency over the years allows reliable comparisons across election cycles. Moreover, it can be used as a helpful validation tool for state-reported estimates of turnout and registration. Although all survey research has some limitations, the VRS is the only consistent survey instrument of its kind.

U.S. Census Bureau

For almost half a century, the U.S. Census Bureau has added a small Voting and Registration Supplement (VRS) to its monthly Current Population Survey (CPS) in November of every federal election year, asking basic questions of eligible voters about whether and how they voted.[4] These data constitute one of the best, longest-running but underutilized information sets collected over time about voting and voter registration in America.

The Census Bureau conducts the CPS in cooperation with the Bureau of Labor Statistics. Its primary purpose is to gather information about the workforce in the United States.[5] Its sample of 50,000 households is scientifically selected to represent the non-institutionalized civilian population of the United States. The survey's design produces statistics that not only describe demographics at the national level, but also at the state level.

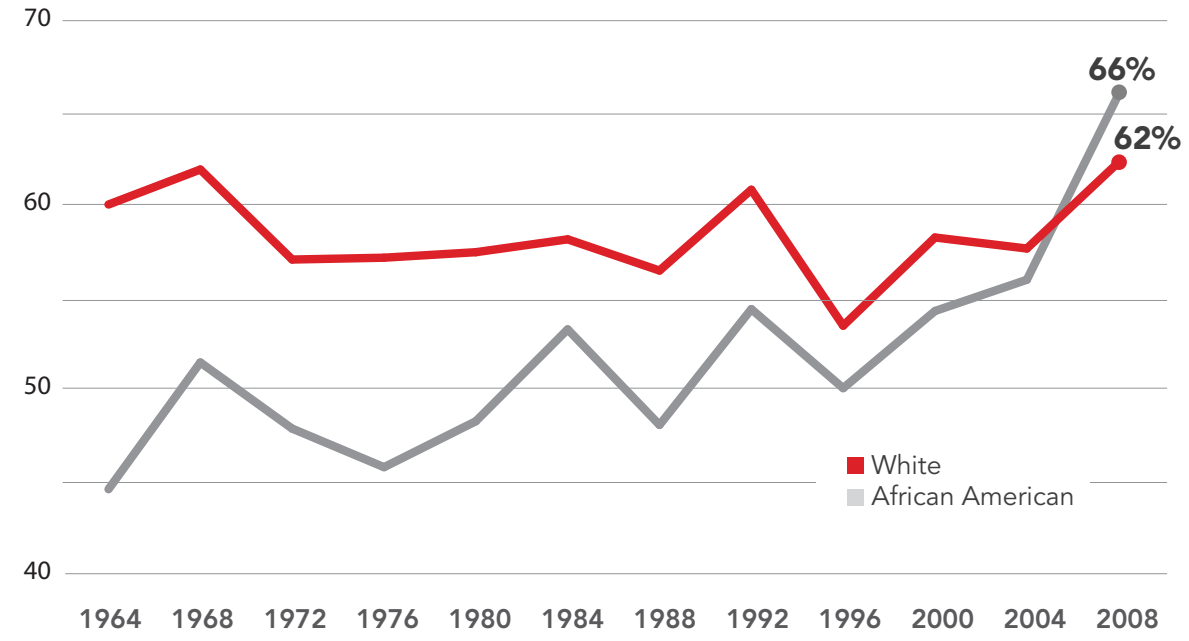
In recent years, the VRS has gathered the following information about voting from applicable persons 18 years old or older:

- Whether they voted in the most recent federal election and, if not, why not.
- Whether they were registered to vote and, if not, why not.
- Where they registered to vote.
- The mode (by mail or in person) and time of voting (on or before Election Day).

Because questions about how people register, what modes they use to vote, and why non-voters do not participate have been asked regularly, the VRS can be used to study the effect of changing laws and regulations on voting behavior.[6] The large number of people surveyed in each study makes it possible to estimate the frequency of relatively infrequent behaviors, such as non-voting for certain reasons, and to make estimates by state. Because of its integration with the CPS, the VRS comes with detailed demographic and economic information, making it possible to estimate the influence of personal characteristics on participation and registration.[7]

Figure 1

Turnout rates, white and African American voters in the South, 1964–2008



SOURCE: U.S. Census Bureau, Current Population Survey, Voting and Registration Supplement, various years.

VRS Data Can Help to Analyze Patterns, Problems, and the Effect of Public Policy

The VRS's longevity and broad scientific acceptance make it an excellent tool to document the effect of election policy changes over time. A good example is the changing voting rate of non-whites in the South since the Voting Rights Act of 1965 was passed.

Figure 1 compares the voting rate of Southern whites and African Americans over time.[8] Using the VRS data, we see an increase in African American voting rates since 1965—an increase that has proceeded in fits and starts—while the participation rate of white Southerners has remained largely unchanged over the past five decades.

One example of state-level estimates made possible by CPS's large sample size is illustrated in Figure 2, which shows the variation in the use of vote-by-mail or absentee voting in each state in 2008. The map shows that voting through the mail is most common in the West, less so in the South and East.[9]

Given the consistency of the VRS across time, it is also possible to track changes in voting methods and measure the rise in non-precinct place voting.

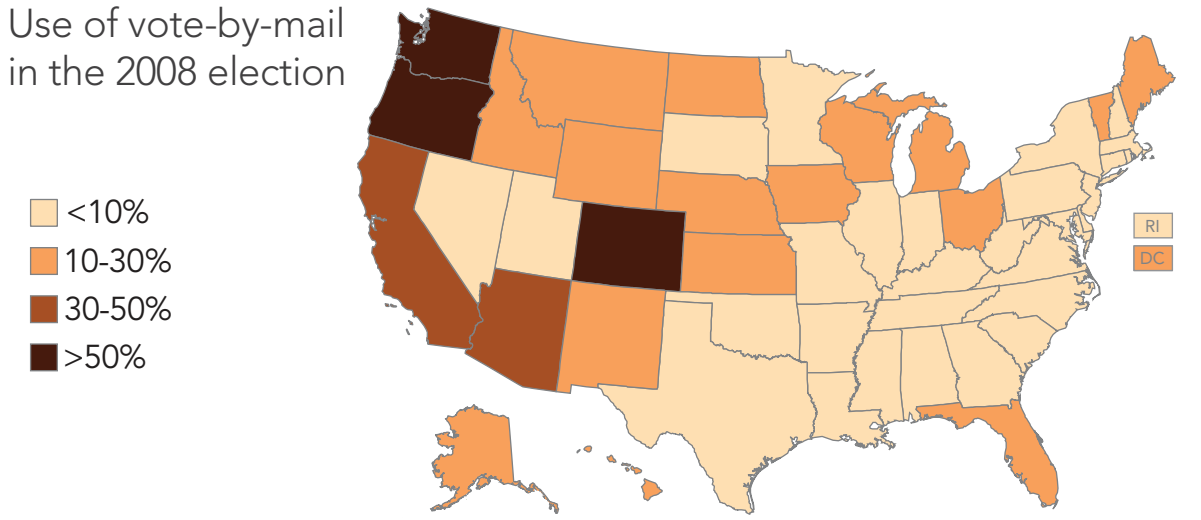
For example, compare the 2006 and 2010 midterm elections. In 2006, 13.8 percent of respondents to the CPS reported they voted absentee or by mail, 5.8 percent voted early in-person, and 80.4 percent voted on Election Day. By 2010, 18.2 percent reported voting by mail, 8.4 percent early, and 73.4 on Election Day.[10]

Using the mail to return ballots in 2010 increased by more than 10 percentage points in six states compared with 2006: Arizona, Colorado, Montana, North Dakota, Ohio, and Washington. In-person early voting grew by more than 10 percentage points in Georgia, Nevada, New Mexico, and North Carolina. Using this kind of data trend for general and midterm elections, election administrators can better allocate scarce resources for different voting methods.

The VRS is often a more useful source of turnout and registration estimates than official election reports, depending on the question being studied. Not all states report turnout, and even those that do might not report how many used different modes: early voting, absentee, and in-person voting on Election Day. Fewer still report this information going back many years. Therefore, the VRS data can supplement, buttress, or stand in for official state reports that might be deficient.

Another benefit of CPS's large sample size is the ability to use VRS data to better understand accessibility problems that may have kept people from the polls. Concrete data are difficult to obtain to answer questions such as, "Which states tend to have the greatest challenges providing access to the polls?" or "Do

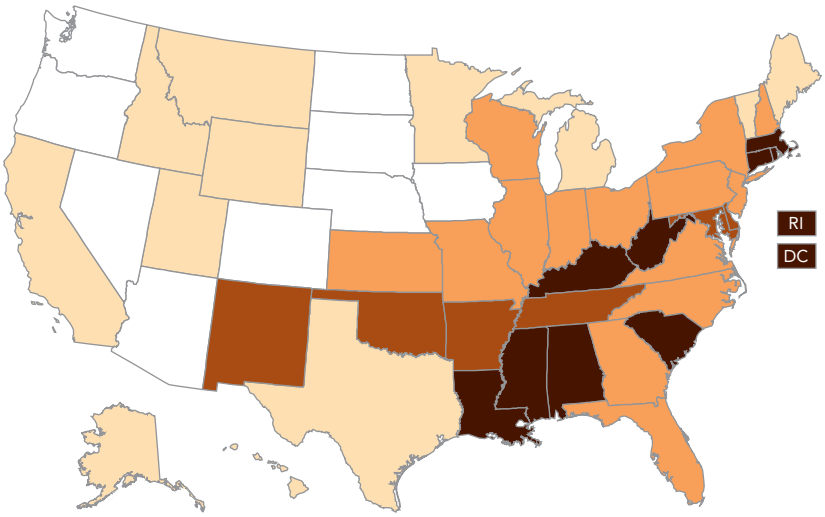
Figure 2



SOURCE: U.S. Census Bureau, Current Population Survey, Voting and Registration Supplement, 2008.

Figure 3

Illness/disability as a reason for not voting, 2000-2010



NOTE: Data reflect state averages during the period.

SOURCE: U.S. Census Bureau, Current Population Survey, Voting and Registration Supplement, 2000–2010.

voters with disabilities employ different means of voting than other voters?"[11] Every two years, the VRS provides data on this issue by asking people who reported that they did not vote to provide one major reason. In 2008, the second-most-common response was "illness or disability (own or family's)," given by 14.9 percent of non-voters.[12] This response rate held steady throughout the first decade of this century. Although there were fluctuations from election to election, the relative frequency of this response from residents in particular states showed a consistent pattern.

Figure 3 shows the average percentage of non-voters in each state who cited illness or disability, across all federal elections from 2000 to 2010. The data reveal clear regional patterns. For instance, this response is given more often in states east of the Mississippi than west of it.

This example shows how data can identify the need for further research into possible problems in election administration. Perhaps more people in some states are disabled or chronically ill. Some states' polling places could be less accessible than those in other states. Some states might also have lower rates of people not voting because of illness or disability since it is easier to vote by mail. The VRS data can help officials ask such questions.

Limitations and Cautions in Using the VRS

We know that overall voter-turnout statistics derived from the VRS in 2008 were very accurate. They closely resembled election officials' estimates that were based on returns. The VRS consistently produces a more accurate estimate of turnout than other academic surveys, such as the American National Election Studies.[13]

However, as with all datasets, there are important limitations and cautions concerning the use of these data.

- **As a supplement to the CPS, the VRS asks only a few questions related to voting and registration, and the response categories do not always help shed light on current issues concerning voting.** For instance, the question about a person's reasons for not voting does not include a response category for "did not have required identification," a current issue for which data are needed.
- **The VRS is of limited use in relating local election practices to voter participation** because the CPS does not record all residents' county of residence.
- **The VRS, like other surveys of voting behavior, is prone to over-report voter participation.** This results from a "social desirability bias," meaning that respondents tend to give answers they believe will make them look good. Many people would like to appear to have voted even if they did not. If the voting rate is over-reported, then the estimated incidence of problems that prevent people from voting will be *under*-reported.[14]
- **The VRS is likely to underestimate the incidence of factors that lead to non-voting** because some people do not respond to the voting and registration questions. In addition, people who do not answer whether they voted are more likely to be non-voters.[15]
- **The effect of social desirability bias can cause respondents who acknowledge not voting to shift responsibility onto election officials.** Therefore, reasons given for not voting may understate the percentage of those who chose not to cast a ballot, and overstate those who had problems related to election administration.
- **The data might reflect that interviews for the CPS are based on households and not on individual respondents.** Interviewers ask about the behavior of other household members who may not be present for the interview. These "proxy" respondents total approximately 40 percent of the sample.[16] Little research has been conducted on the effect of this method of conducting interviews. Some research suggests that people answering questions about household members' voting-related behavior might provide more accurate information than those individuals would provide themselves.[17]

- The VRS has never been subjected to a "voter validation study," which is a common practice in major academic studies of voter participation, such as the American National Election Study.[18] In such a study, researchers compare the answers from respondents about whether they voted with local registration records showing whether they actually did cast a ballot.[19] This would provide a clear understanding of which demographic categories in the VRS most accurately estimate voter participation.

U.S. ELECTION ASSISTANCE COMMISSION

The Election Assistance Commission's Election Administration and Voting Survey (EAVS) provides the only comprehensive, nationwide dataset concerning election administration and policy. Consistency and completeness significantly improved from 2004 to 2006 and from 2006 to 2008. In 2008, the EAC added a Statutory Overview component that provides a first-ever synopsis of laws and procedures related to election administration across the nation. Given the similarity of the 2008 and 2010 instruments, it is expected that increasingly reliable comparisons will be possible across election cycles.

U.S. Election Assistance Commission

An essential source of data about the performance of American elections is the Election Assistance Commission (EAC), which was established by the 2002 Help America Vote Act (HAVA) to "serve as a national clearinghouse and resource for the compilation of information and review of procedures with respect to the administration of Federal elections." EAC has the authority to conduct studies of election administration in the United States for the purpose of making voting more convenient, accessible, accurate, secure, non-discriminatory, and efficient.[20] HAVA also transferred responsibility for assessing the National Voter Registration Act's impact from the Federal Election Commission to the EAC[21] and mandated that after each federal election the EAC shall collect comprehensive data from the states concerning absentee ballots transmitted and received under the Uniformed and Overseas Absentee Voters Act.

Two EAC data programs are especially important, the Election Administration and Voting Survey (EAVS) and the Statutory Overview.

The Election Administration and Voting Survey

The EAC developed the EAVS to gather data from the states and other federal territories about a variety of topics related to election administration, including voter registration, uniformed and overseas

citizens absentee voting, domestic civilian absentee ballots, provisional ballots, and Election Day activities.[22] The EAVS was first administered after the 2004 presidential election and has become the only census of basic data concerning election administration and policy in America.

Although the EAC's written reports focus on state-level statistics, the underlying EAVS data are available with local breakdowns. Before 2008, statistics were reported at the county level. These statistics have since been reported at the municipality level in states where the primary responsibility for administering elections rests with municipalities (e.g., some states in New England).

The EAVS is particularly valuable for understanding how specific election functions are working, allowing comparisons across states and across counties within states. For instance, it enables one to determine:

- How many provisional ballots were issued and counted.
- How the provisional ballots were counted.[23]
- The reasons provisional ballots were rejected.

The EAVS's statistics can be combined to identify discrepancies, such as those between the number of absentee ballots sent to voters and the number returned for counting.

Areas for Continued Improvement of the EAVS

As the EAC has implemented the EAVS program, challenges to undertaking this task have become clear, pointing the way to improvements that would make the data even more valuable.

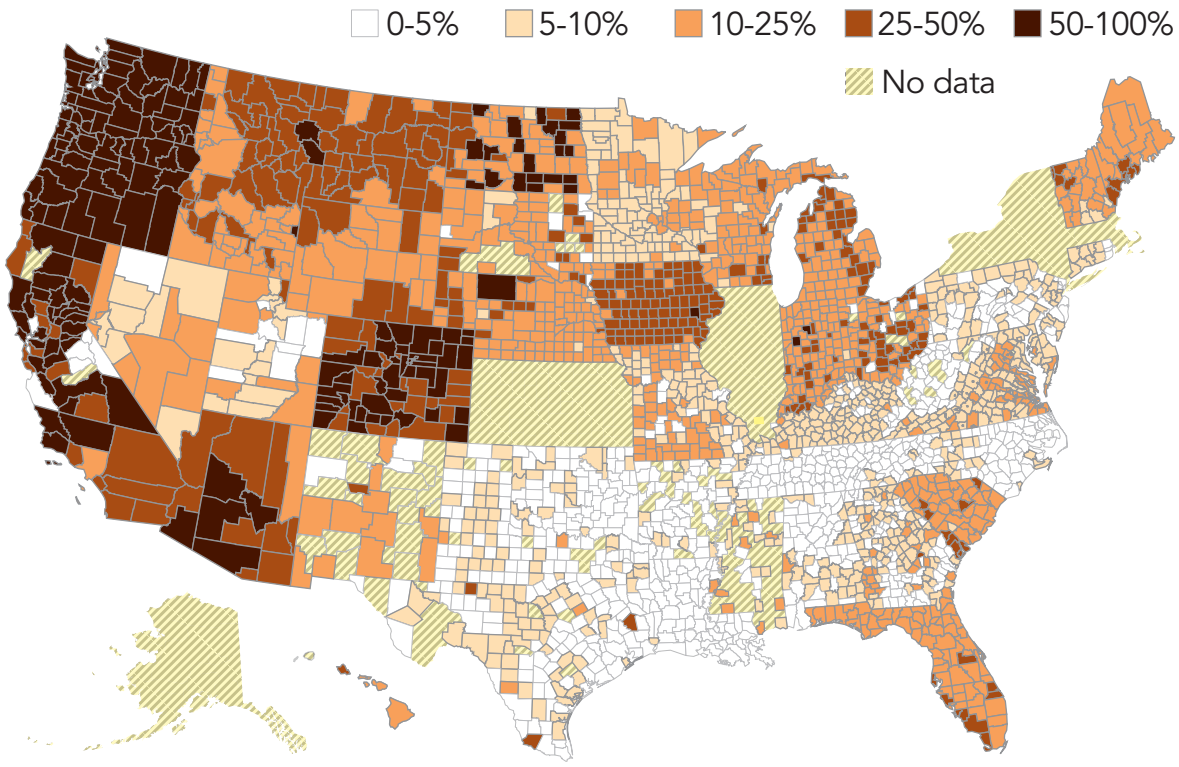
- **There is no common vocabulary among states for basic elements of the election process.** For instance, the EAC's 2008 Statutory Overview asked states to report the terms they used to refer to in-person early voting. Although the most common term is "early voting" (a term used by 12 states), Kansas refers to it as "in-person advance voting," and North Carolina refers to it as "one-stop absentee voting." Several states call this procedure "absentee voting," although their early voting statutes do not require an excuse in order to vote in this manner. Such variability in terminology and interpretation of survey question wording makes it difficult for the EAVS to yield consistent results across states.
- **Practices vary from state to state and do not always easily correspond to questionnaire categories.** For example, the EAVS questionnaire assumes that the normal voting mode is to cast a ballot in person. This design makes it difficult to account for statistics

from a state such as Oregon that does not have in-person voting.[24] In Oregon, votes are cast by mail, and it has a separate absentee-ballot procedure for people who are temporarily away from their home addresses. If Oregon reports statistics associated with its regular postal ballots in the section reserved for domestic absentee voting, there is no place to record information about its absentee-balloting system, and vice versa.

- **States do not always mandate that local units collect and keep data about the workflow of elections.** A few states do not require counties to report how many voters were issued a ballot, let alone more specific statistics. In some states, the chief election official does not have the authority to direct county election officials to collect and report election-related data, even when that collection is mandated by federal law. As a result, even when state election divisions wish to participate fully in the EAC's data reporting efforts, they might not have the local data they need.

Figure 4

Absentee ballot usage in the 2008 election



NOTES: Illinois, Kansas, and Massachusetts did not report data. New York did not report data at the county level. Alaska is divided into boroughs and does not have data at the borough level.

SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

Using the EAVS Data

Still, the EAC has steadily improved the quality and completeness of data produced by the EAVS. As shown in Tables 1 and 2 in the appendices, the average completeness of states' data improved from 72 percent in 2006 to 85 percent in 2008.

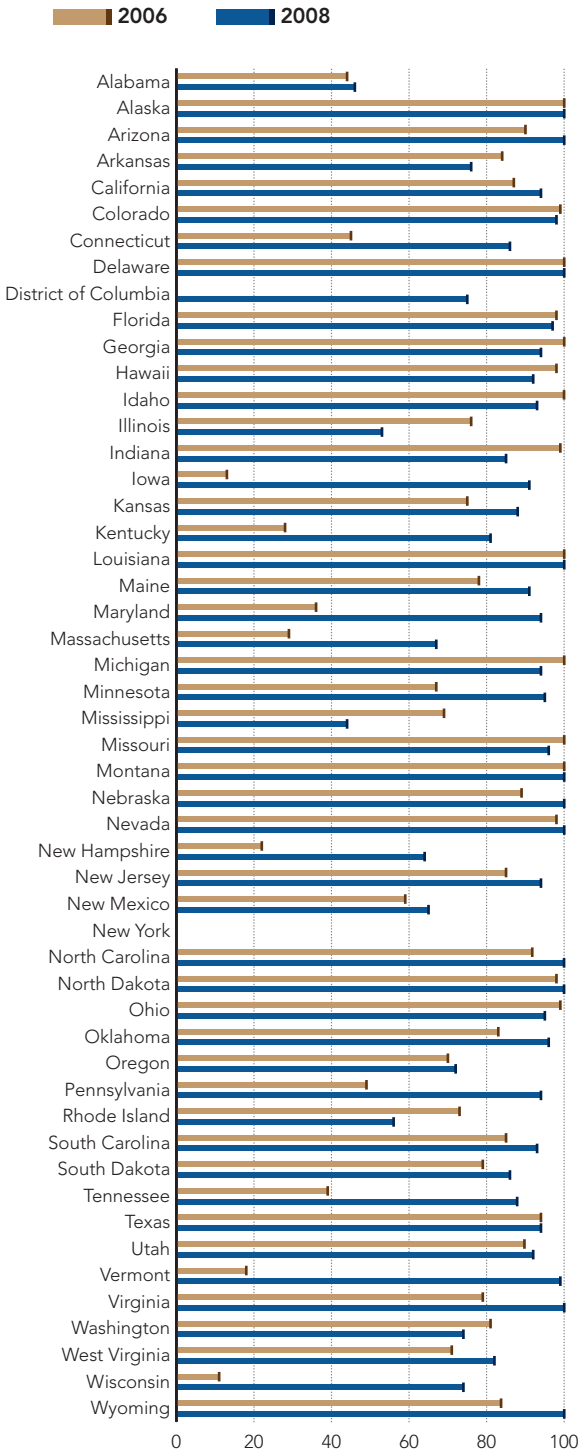
The EAVS is most valuable for helping to develop basic, workflow-related statistics related to election administration. An example of this, mapped in Figure 4, is the percentage of ballots cast absentee (or through the mail). Unlike other maps in this section, Figure 4 shows statistics by county.

This map illustrates a number of the EAVS data's features. First, note that some counties are marked as having no data reported to the EAC. The pattern of missing data ranges from a smattering of counties in a few states to a complete lack of county-level data for five states.[25]

Among the counties that did report data, the shading shows great variation in how different regions of the country rely on absentee ballots. The map illustrates the relatively high use of absentee-mail balloting in the West and its relative rarity in most of the South and Eastern Seaboard. In a few states, such as Montana and North Dakota, the use of absentee ballots varies tremendously by county. In most states, however, absentee-ballot use falls within a fairly narrow range across counties.

Figure 5

Completeness of data reporting in the 2006 and 2008 EAVS among 15 core measures.



SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2006 and 2008.

Limitations and Cautions in Using the EAVS

- State and local data are often incomplete and inconsistent. Federal law requires states and localities to respond only to the sections of the survey pertaining to the National Voter Registration Act (NVRA) and the Uniformed and Overseas Absentee Voters Act (UOCAVA). Some states and local jurisdictions regularly do not comply with even those requirements.[26]

  Figure 5 documents the completeness of state and local reporting on 15 core election-administration issues concerning voter registration, provisional ballots, turnout, civilian absentee ballots, overseas absentee ballots, and vote counting.[27] The methodology section provides details about each of these measures.

  Seventy-two percent of the core EAVS election-workflow data were reported in 2006, rising to 85 percent in 2008. It is encouraging that data-reporting thoroughness improved so rapidly between two federal elections.

  The biggest increase was for the basic information concerning UOCAVA ballots. (See Tables 1 and 2 in the appendices.) In 2006, only about half the counties (weighted by population) reported data about the transmission of blank UOCAVA ballots to voters and the receipt of returned, completed ballots by elections officials. In 2008, about 90 percent of counties reported these data, and only a relative handful of counties did not report how many UOCAVA ballots were transmitted.

  Reporting basic statistics about the use of provisional ballots also improved, which undoubtedly reflects an increase in states with standard operating procedures for using them.

  The smallest gains came in reporting registration statistics, with significant numbers of counties still not reporting data related to new registrations. However, registration data were reported at a much higher level in the 2010 survey—a promising sign for future iterations of the EAVS.[28]

- Anomalies and ambiguous data provide another reason for caution concerning EAVS data. An example of an anomalous data entry is when the number of absentee ballots that are reported counted is greater than the number reported mailed out.

  Another type occurs when states or local jurisdictions put a zero on the survey form when they mean they did not keep track of the data, or the data are missing. For instance, 537 counties are recorded in the EAVS dataset as having zero registered voters in 2006, and 898 are recorded

as having zero voters coming to the polls.[29] In such cases, it is safe to assume that zero means the data are missing. On the other hand, when 917 counties reported for 2006 that they transmitted zero ballots to overseas military voters, it is difficult to know which counties really sent none of these ballots, and which entered zero to indicate that they did not have or report the data.

- **A time lag in reporting is the final concern,** as nearly a year could pass between a federal election and the release of the corresponding EAVS reports and datasets. For instance, the EAVS data about the 2008 elections were not available to the public until the fall of 2009. In contrast, the VRS was released in May 2009.

Statutory Overview

In 2008, the EAC added a second part to the EAVS—a Statutory Overview. The goal was to gather information from the states that can be used to compare election-administration laws and procedures across the nation. The original Statutory Overview was subcontracted to the Moritz College of Law at The Ohio State University. The review was administered again in 2010 and posted to the EAC Web site in May 2011.[30]

The 2008 Statutory Overview questionnaire asked all states for information about election administration legal requirements and practices: how they define nine terms related to voting and ballots;[31] how they move voters from active to inactive status; whether they require post-election audits; and if so, the scope and method of these audits. The report contains useful summary tables concerning absentee and early voting terminology, along with states' procedures on voter registration, felon disenfranchisement, non-precinct place voting, provisional voting, voter identification, and polling-place operations. The original responses to the survey are available on the EAC's Web site.[32]

Repeating this Statutory Overview in future years will provide crucial data for considering such issues as:

- Whether an election-law provision is outdated.
- How much discretion is or should be given to local administrators.
- Whether laws and regulations are being implemented faithfully.
- Whether there is a gap between law and practice.
- Whether differences in the EAVS data across counties and states result from different laws or different implementation of the same or similar laws.

OTHER PUBLIC OPINION SURVEYS

In addition to the Census Bureau's Voting and Registration Supplement (VRS), other public opinion surveys provide useful information, especially for analyzing the election experience from voters' point of view. The 2008 Survey of the Performance of American Elections (SPAE) is an excellent source for capturing behaviors and attitudes about the voting experience, as well as the amount of time spent in line waiting to vote. The Cooperative Congressional Election Study (CCES), a post-election survey administered every year since 2005, also includes questions that are similar to some of those in the SPAE, but have been asked over a slightly longer period of time.

Other Public Opinion Surveys

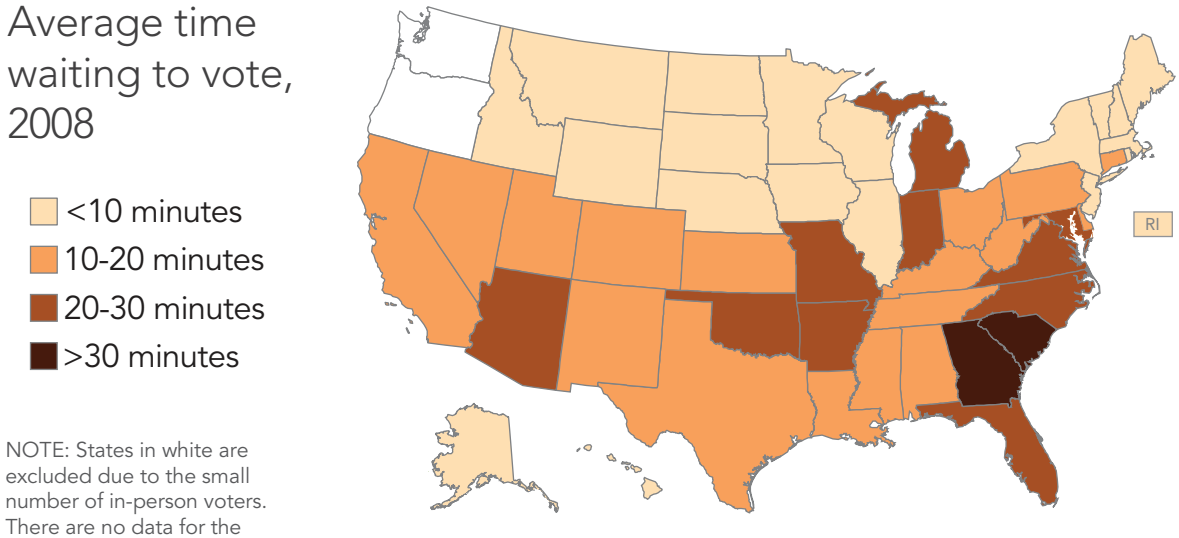
There are some subjects related to election administration and policy on which the EAVS cannot provide data, such as voter attitudes about the election process. Survey research by academics, nonprofit organizations, or commercial firms can be valuable for probing behaviors or experiences that are difficult to observe directly, or for which record keeping is inconsistent across geographic units that manage elections.

The Survey of the Performance of American Elections

One of the most extensive of these projects is the Survey of the Performance of American Elections (SPAE), which was conducted in 2008.[33] The SPAE is the only national opinion survey to study election administration comprehensively and to

Figure 6

Average time waiting to vote, 2008



NOTE: States in white are excluded due to the small number of in-person voters. There are no data for the District of Columbia.

SOURCE: Survey of the Performance of American Elections, 2008.

focus on states.[34] Using an Internet-based survey of 10,000 registered voters—200 from each state—the SPAE took place during the week immediately after the 2008 presidential election.[35] By using that size sample for each state, the SPAE makes it possible to draw valid comparisons across states.

The SPAE asked questions about three issues:

1. Voting methods that occur away from polling places, such as absentee balloting.
2. Behaviors and experiences that states might record in different ways, such as turnout.
3. Attitudes of voters toward their voting experience.

Time waiting in line to vote is one example of an issue that the SPAE is well suited to document. Using survey answers, estimated state averages varied significantly, from 2.5 minutes in Vermont to roughly an hour in South Carolina. As Figure 6 illustrates, there are strong regional patterns in average wait times, with states along the southern Atlantic coast and the industrial Great Lakes region showing significantly longer lines than in the rest of the country.

Limitations and Cautions Using the SPAE

In addition to the general limitations of surveys discussed in the analysis of the Census Bureau's VRS, users of the SPAE should be aware of several considerations:[36]

- Difficulties recalling past behavior. Although the SPAE was administered in the days immediately after the 2008 general election, its subject matter—the act of voting—might not be a matter of great concern for some voters. Memories can fade or become confounded with press accounts of Election Day. Memory decay could be greatest among respondents who voted before Election Day, either early or by mail.
- Small sample sizes for certain issues. Of all SPAE respondents, 2.2 percent reported registration problems, 2.3 percent reported voting machine problems, and 2.2 percent reported problems getting absentee ballots. These rates can be precisely estimated nationwide because the sample size is so large. But when we estimate the incidence of these problems at the state level, the numbers are too small within states to be reliable and thus impossible to make valid comparisons within them.
- Limited information on demographics. The SPAE contains a limited set of demographic and

political variables such as age, race, income, education, years of residence, and disability, so analysis based on other factors is not possible.

- **Only conducted once.** The SPAE has not yet been repeated, which means there are only data from 2008, and it is not possible to compare the results from multiple elections to identify patterns, anomalies, or areas for survey-design improvement.

Additional Surveys

The Cooperative Congressional Election Study (CCES), a post-election survey that has been administered every year since 2005, in even-numbered years often includes on its core questionnaire a limited number of questions about voters' experience at the polls.[37] Because the number of respondents has ranged between 32,000 and 50,000 in these election years, there is a large enough sample to study this at the state level.

In addition to the questionnaire administered to tens of thousands of respondents, the CCES also consists of smaller team-designed modules that are administered to a smaller sample, usually 1,000 voters. These modules focus on a particular public opinion topic, which sometimes might be related to election administration. For instance, in 2008 researchers from the Brookings Institution and the American Enterprise Institute asked an extensive set of relevant questions, such as the time of day the respondent voted, the length of time it took to travel to the polls, poll workers' performance, and whether there was enough parking at the polling place.[38]

Other notable public opinion projects that have regularly focused on election administration-related experiences, albeit in a more limited way, include the National Annenberg Election Survey[39] and surveys conducted by the Pew Research Center for the People & the Press.[40]

Expert Assessments

When it is not feasible to gather data based on the direct experience of voters

EXPERT ASSESSMENTS

Expert assessments provide a method to quantify data that are challenging to gather by traditional observation or survey methods. For example, for Pew's 2011 report, *Being Online Is Still Not Enough*, experts examined state election Web sites for content and usability, based on criteria that could be applied consistently across states. The field of elections is ripe for more such assessments, such as studying vote-counting quality by examining the discrepancies between the original canvass and post-election audits.

and election officials, the next best option could be to turn to knowledgeable policy experts.

Expert assessments are used as a research and measurement tool in many other fields in which it is almost impossible to collect data by traditional methods. An example is Freedom House's *Freedom in the World* report.[41] It scores countries on political rights and civil liberties based on reports by experts who use standardized questions to rate each nation.[42]

Due to the potential variability in experts' opinions, successful evaluations typically employ two techniques to enhance their validity: 1) relying on well-known, shared professional standards and 2) arranging for multiple experts to provide independent assessments.

An example of this approach to measure election administration is *Being Online Is Still Not Enough*, issued by the Pew Center on the States in December 2011. This report examined the election Web sites of all 50 states and the District of Columbia, measuring both Web site content and usability—that is, if potential voters could readily find the necessary information on these sites and if it would help them.[43]

In general, sites were assessed according to the degree that users could quickly and reliably find what they need. This is an

essential feature of an election Web site for a state to avoid such problems as increased call volume, loss of registrants, loss of votes, and uninformed voters.

The field of election administration is ripe for study using expert assessments when reliable direct measures are not possible. In the case of vote-counting quality, a direct measure would compare returns as initially canvassed with the results of post-election audits. However, since some states do not conduct audits, and those that do might use different standards and procedures, direct measurement may not be possible. Expert assessments could be conducted by surveying people with experience conducting, studying, or covering recounts and post-election auditing to develop a standardized measure of vote-count accuracy.

OTHER DATA SOURCES

The Federal Voting Assistance Program (FVAP) conducts a survey with the Defense Manpower Data Center that provides one of the most detailed looks at military and overseas civilian (UOCAVA) voters and their voting experience. Private organizations such as Election Data Services, Catalist, and Verified Voting collect well-maintained and easily broken down data that are available on a proprietary basis.

Other Data Sources

There are other sources that are publicly available but have not been used extensively to research election administration.

The Department of Defense's Federal Voting Assistance Program (FVAP), in collaboration with the Defense Manpower Data Center, conducts surveys of UOCAVA voters and reports its findings to Congress.[44] As FVAP notes, methodological shortcomings before 2008 limited the general usefulness of these data. However, after a review of the program, the 2008 survey used a more rigorous sampling design. The FVAP surveys go to both election administrators and voters.[45]

The questions in these surveys are similar to those in the EAC's EAVS and the Census Bureau's VRS. However, some of the surveys go well beyond what is found in these more commonly used datasets. The 2008 post-election voting survey of uniformed service members, for example, asked 57 questions related to voting, such as when respondents received their ballot and from what sources they got information.

Private organizations gather data related to elections and may make it available for a fee. Election Data Services tracks voting equipment used by states and localities, along with collecting statistics on state and local elections that are difficult to acquire on the Web, such as turnout or party registration, broken down at the precinct level.[46]

Catalist is among the private companies that supply updated and cleaned voter lists to their clients, which are often political campaigns and organizations. Although the data are primarily used for get-out-the-vote purposes, they might also be used as a check against the accuracy of official voting lists.[47]

Verified Voting, a nonprofit organization, "champions reliable and publicly verifiable elections in the United States."[48] One feature of its Web site is "the verifier," which allows users to explore in detail the types of voting machines used across the country.[49]

Although often overlooked, these well-maintained datasets can make a significant contribution to ensuring that election administration policy is based on data and not just anecdotes.

Section 2. The National Picture

To illustrate how the information sources reviewed in Section 1 can generate summary measures of the performance of election administration and policy, this section goes more deeply into those datasets to examine the following basic questions:

- How many people are registered to vote?
- How many people turn out to vote?
- How many people think their vote was counted as cast?

The available data provide important information to administrators and policy makers, even though answers to these questions are not always simple.

Voter Registration Rates

In every state but one, a citizen must be registered to vote in order to cast a ballot.[50] The general trend in state voter registration laws since the 1960s has been to eliminate the most draconian obstacles, such as long waiting periods or requirements that citizens register at courthouses that were

VOTER REGISTRATION RATES

Multiple data sources must be used to fully analyze voter registration rates. Calculations depend on such factors as whether one includes "inactive" voters or people of voting age who may not be eligible. Data from the Census Bureau's VRS can be compared with statistics in the EAC's National Voter Registration Act (NVRA) report to pinpoint which states' voter rolls are more inflated than others and how registration rates tend to vary by geographic region.

rarely open for business.[51] The National Voter Registration Act (NVRA), passed in 1993, mandated that states play an active role in facilitating registration, requiring that they make materials available at motor vehicle offices and social service agencies, such as state and county health providers, and that potential voters be allowed to register by mail using a postcard form.

One useful indicator of election administration performance is the variation across states and localities in the percentage of eligible voters who pass the registration hurdle. The registration rate is the number of registered voters divided by the number of citizens eligible under state law. Both numbers depend on which methods and criteria are used for counting.

Estimating the Number of Registered Voters

Current state registration systems have not kept up with technological advances or with America's rapidly changing—and mobile—society.[52] This contributes to inaccuracies in registration lists that include unnecessarily large numbers of former voters who have moved, died, or decided to stop voting—along with duplicates and erroneously entered registration records. Research by Ansolabehere and Hersh estimated that of 185.4 million voter registration records in early 2010, 16.1 million were invalid, often because of problems with the record's address. In addition, one in 25 was estimated to represent "deadwood"—people on the rolls who in all likelihood died or moved.[53]

The states also do not have a consistent practice on whether to include "inactive" voters in reports on the number of registered voters. Inactive voters are those who did not vote in some number of recent elections as defined by that state. Sixteen states exclude inactive voters when they report the number of registered voters.[54] Thirty states combine active and inactive voters, since people in the latter group might still be legally eligible if they did not vote recently because of personal choice rather than

that they died or moved away. In four states, some local jurisdictions report active voters only and others report both types. When states do include the inactive voters, the total number of registration records can sometimes exceed estimates of the entire eligible voting population. This is sometimes interpreted as a sign of fraudulently padded rolls, but it could simply indicate either 1) reluctance to remove eligible voters who have not chosen to vote recently or 2) compliance with the NVRA, which permits removing voters only after meeting certain requirements.[55]

Estimating the Number of Eligible Voters

The number of eligible voters is based on population estimates. For many years, the standard used was the Voting Age Population (VAP) estimate produced by the Census Bureau. One flaw is that it includes those who are ineligible to vote, such as non-citizens. This led to the development of an alternative, the Voting Eligible Population (VEP), which starts with VAP estimates and then uses Census Bureau figures to remove non-citizens and ineligible felons, depending on state laws.[56] VEP's shortcoming, however, is that it does not provide estimates by county. Therefore, VAP is the only measure available for calculating local turnout based on the number of eligible voters.

Calculating Registration Rates

If we calculate registration rates using the number of registered voters provided by state election officials divided by population estimates taken from Census Bureau reports, four different measures are possible, depending on whether the numerator includes or excludes inactive voters, and whether the denominator is VAP or VEP.

What difference does this make? Consider Arizona's example. The following table provides four registration rates from 2008, depending on the data used:

Mesure of Registrants	Measure of Eligibles	Rate
Active only	VAP	62.3%
Active only	VEP	71.7%
Active + Inactive	VAP	71.8%
Active + Inactive	VEP	82.6%

Comparing Methods for Estimating Registration Rates

Because states do not use a common method of reporting registration statistics, it is useful to compare their figures to rates drawn from surveys of eligible voters, even though surveys also have limitations, as discussed in Section 1. To calculate the voter registration rate via the survey method, we rely on answers to the registration question contained in the Census Bureau's VRS.

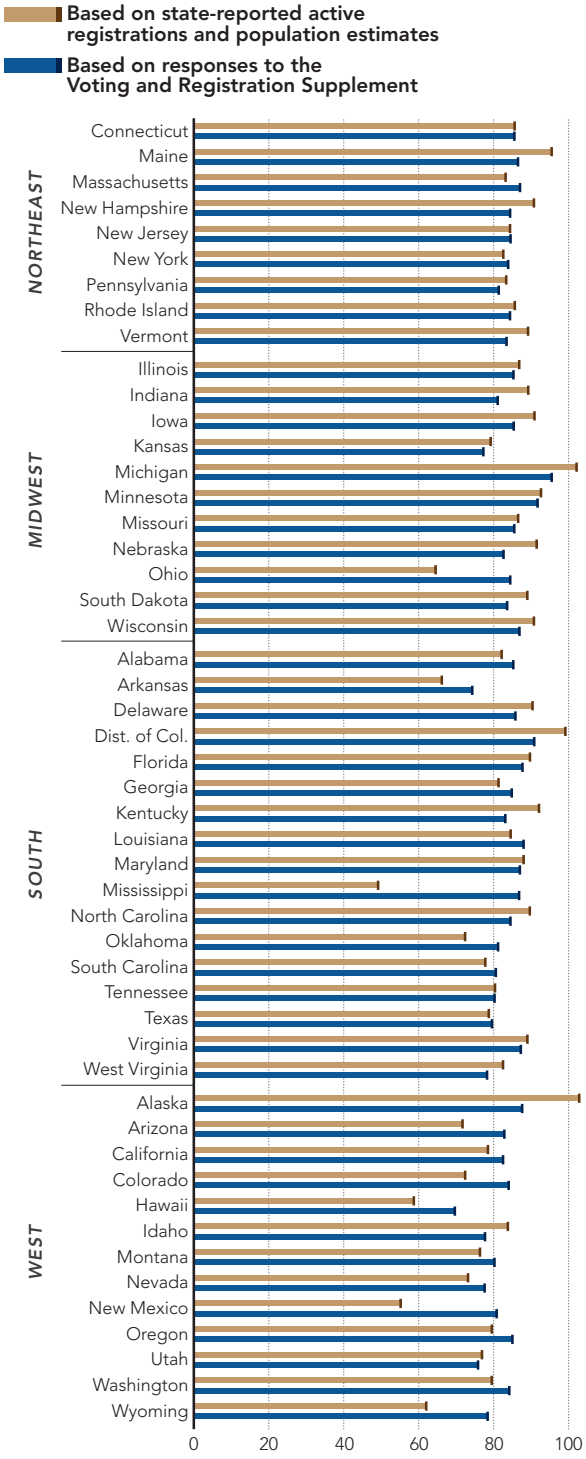
Figure 7 illustrates these rates using the two methods that provide the most consistent comparisons across states—one that divides the number of active voters by the voting eligible population, and the other that relies on answers to the VRS.[57]

Several conclusions are suggested:

- **Registration rates are always estimates** and depend on the method used. Both state-reported figures and the VRS estimates have benefits and detriments, but neither are completely precise representations of registration.
- **The registration rates produced using the VRS show much less variation from state to state than the rates calculated using official registration statistics.**[58] The VRS often shows mildly inflated voter rolls due to the over-reporting bias discussed in Section 1. But states report their own registration rates so differently that a consistently measured survey such as the VRS will often provide greater standardization across states, especially over time.
- **The rankings produced by the two methods are very similar.**[59] States that show high rates under one method tend to do so under the other method, and the same is true of states with low rates or that are in the middle of the pack. Therefore,

Figure 7

Voter registration rates using two methods, 2008



NOTE: North Dakota does not have voter registration.

SOURCE: U.S. Election Assistance Commission, *The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office 2007–2008*; United States Election Project, http://elections.gmu.edu/voter_turnout.htm; U.S. Census Bureau, Current Population Survey, Voting and Registration Supplement, 2008.

for policy-making purposes, the exact figure might be less important than the fact that a state has lower rates than others that have adopted practices to increase participation.

- **Registration rates vary by regions.** The rates are highest in the Upper Plains states and along the Atlantic Seaboard, and lowest in the West and Southwest. Unlike a generation ago, states of the Deep South no longer uniformly have the lowest registration rates in the nation.

Voter Turnout Rates

Multiple data sources are needed to estimate voter turnout rates. The best method for valid cross-state comparisons is to calculate turnout as a percentage of eligible voters. The Census Bureau's VRS data can be compared to statistics reported by state boards of elections. The VRS rates are generally about 10 percentage points higher than the boards', yielding rankings that are very similar under the two methods.

Calculating the number of people turning out to vote in elections is a source of considerable discussion among those concerned with the health of American democracy.

As with calculating the registration rate, calculating the voter turnout rate requires the definition of the appropriate numerator and denominator—the number of people voting divided by the number registered. Neither has a straightforward definition across states.[60] However, the various calculation methods produce similar results, allowing states to compare relative performance.

Estimating Turnout and Improving Record Keeping

Not all states account for the number of people who voted as a separate statistic. In the 2008 federal election, four states did not track how many people voted, but only reported the number of votes received by candidates. Some publicly reported write-in votes and some did not.[61]

States that do not attempt to record the number of people who voted generally estimate turnout by the number of votes cast for the highest office on the ballot. This will always underestimate turnout because some voters will abstain in the top-of-the-ballot race, especially in years in which there is no presidential election. It also will underestimate turnout because it will not record citizens who showed up, but whose votes were not recorded for reasons such as a technological malfunction.

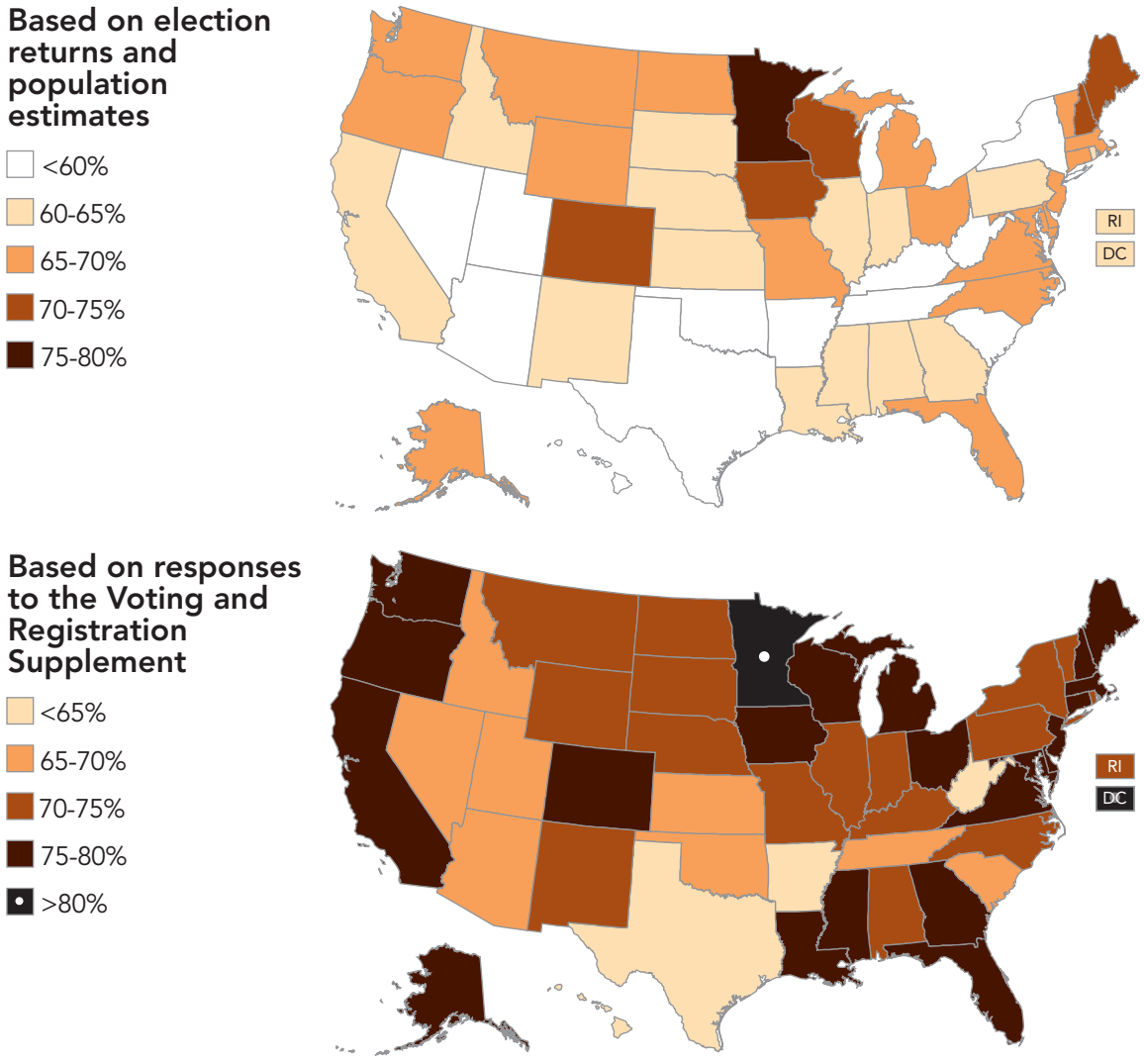
States that do tally the number of people who voted rarely use the same method, even across counties within the state, according to the 2008 EAVS responses. Some count the voters checked off the

voting list by poll workers. Others add up the ballots counted in the precincts or the central office. Some states wait until the vote history list is updated, usually months after the election, to count the number who voted.

Turnout rates based on registration statistics might provide valid comparisons within a state, but not across states. When election officials report turnout rates by dividing the number of voters (however they calculate it) by the number registered, they could be using any of the many methods discussed earlier to calculate the registration figures.

Figure 8

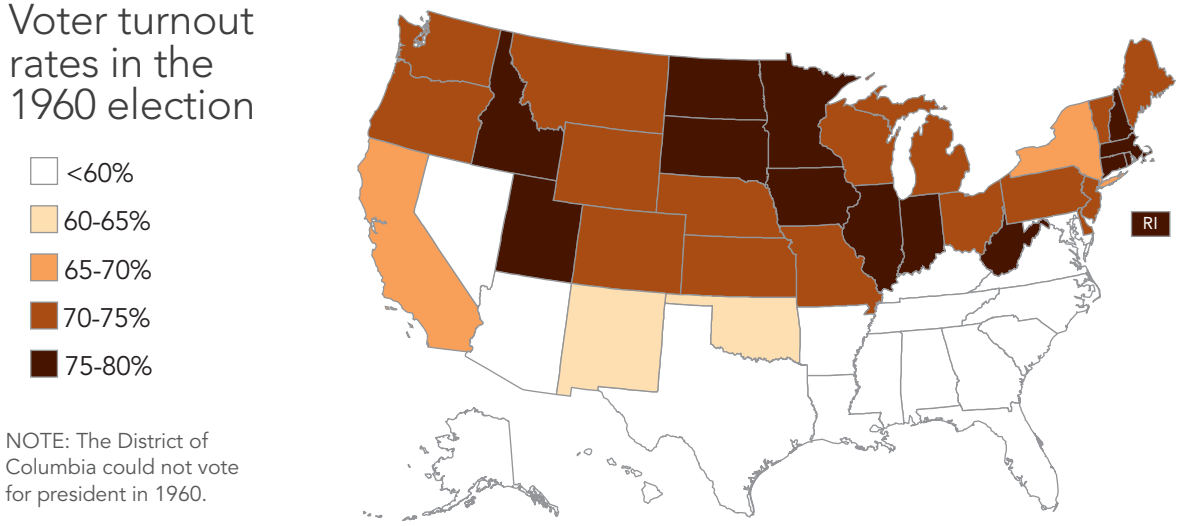
Voter turnout rates using two methods, 2008



SOURCES: State boards of elections; United States Elections Project, http://elections.gmu.edu/voter_turnout.htm; U.S. Census Bureau, Current Population Survey, Voting and Registration Supplement, 2008.

Figure 9

Voter turnout rates in the 1960 election



NOTE: The District of Columbia could not vote for president in 1960.

SOURCE: David Leip's Atlas of U.S. Presidential elections, http://uselectionatlas.org.

Comparing Methods for Estimating Turnout

To compare turnout rates across states, we need to rely on a common method of estimating both the number of people who tried to vote and the number who were registered. In Figure 8, we examine two for the 2008 election: one that uses state returns and Census Bureau estimates to calculate the percentage of the voting eligible population that turned out, and the other that uses the percentage of VRS respondents who reported they voted.

Several patterns emerge from this comparison:

- **The rate estimated using the VRS is consistently higher than the rate calculated from actual election returns**—on average, by 10 percentage points. This is not surprising, given the social desirability bias in which people responding to a survey tend to overstate their participation.
- **The rankings produced by the two methods are very similar.**[62] As we saw with voter-registration rates, the consistency of rates using multiple calculation methods means that policy makers and administrators often can use available data to identify areas for improvement without being concerned about variations yielded by different methods.
- **Regional differences are in sharp contrast to those found several generations ago,** as shown in Figure 9, which illustrates turnout rates from the 1960 presidential election. At that time, the high-turnout states were universally along the northern tier, with the lowest turnout in the

southern and southwestern states most affected by Jim Crow laws designed to discourage non-white voting. The change in regional differences since then probably reflects a combination of state registration laws and the mobilization of national campaigns.

In comparing turnout rates across states, methods that rely on a measure of eligible population are much more reliable than those based on registered voters, which are reliable only when used within states. This is because states vary considerably in how they arrive at the number of registered voters, whereas Census Bureau population estimates are calculated using the same method nationwide.

Voter Confidence

Some factors that affect voters' confidence that ballots are being counted as intended are under administrators' and policy makers' control. Other factors, such as political partisanship, are not. Data show that many voters have more confidence in the election system's integrity when their candidate has won. Recent studies also show that Americans generally are more confident that their vote or votes in their own community were counted accurately, as opposed to votes across the country. Voters' confidence in the accuracy of the national count declined significantly in 2010.

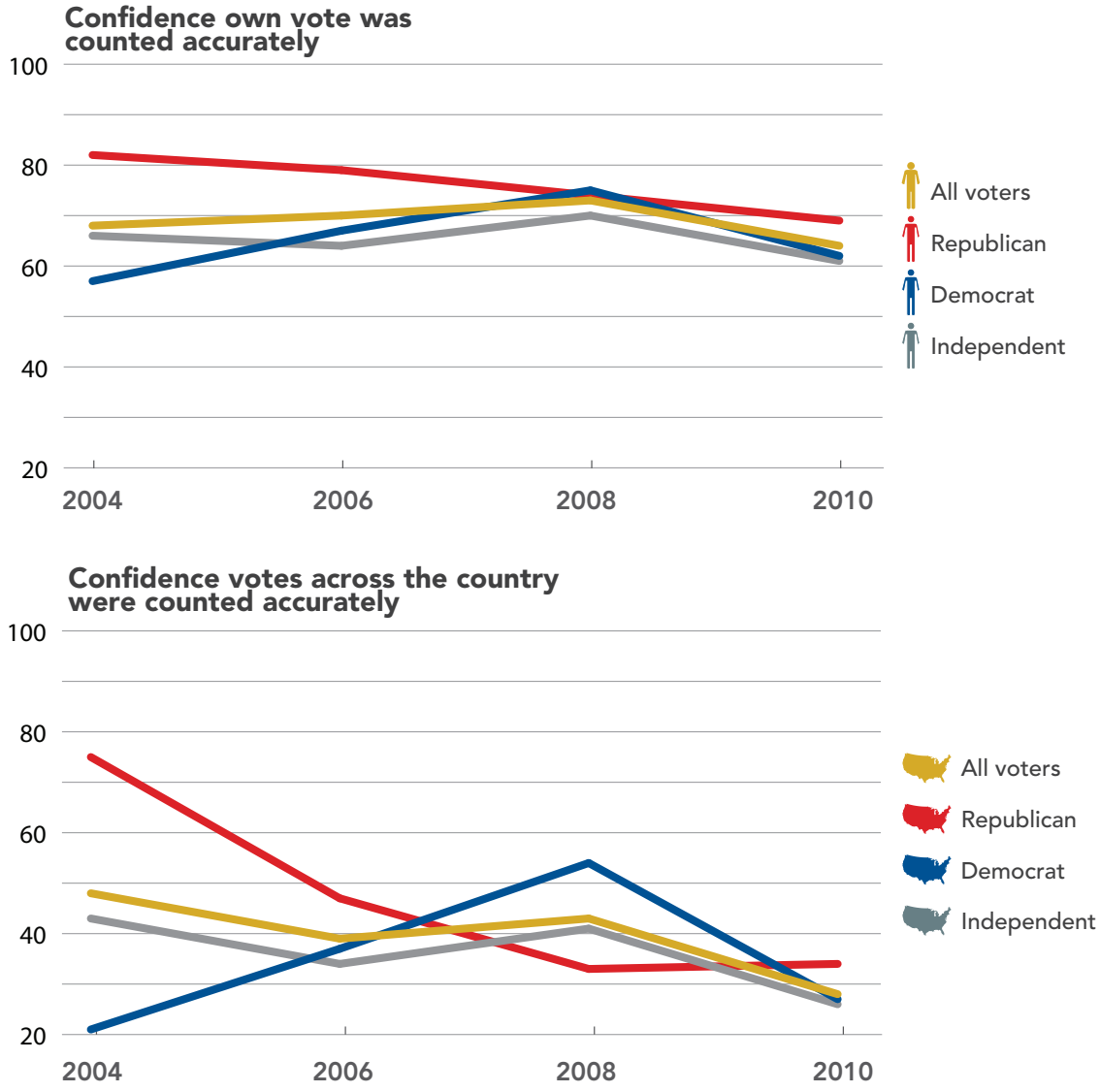
Voter confidence that elections are conducted fairly is essential to government legitimacy. Yet the controversy surrounding the vote count in the 2000 presidential election raised doubts among many Americans about whether ballots are always counted as they were cast.

Measuring whether citizens believe elections are conducted fairly has rarely been done. Many academic studies have examined questions such as whether Americans trust government to act in their interest, but the issue of electoral integrity has almost never been broached.

An exception was the Comparative Study of Electoral Systems (CSES), a major 31-country study conducted in the late 1990s and early 2000s.[63] The CSES asked this question of respondents: "Thinking of the last election in [your country], where would you place it on this scale of one to five where ONE means that the last election was conducted fairly and FIVE means that the last election was conducted unfairly?"[64] The United States, which was surveyed after the 1996 election, ranked in the middle, with 49 percent giving American elections the top mark, a proportion slightly lower than in Mexico (53 percent) and slightly higher than in New Zealand (47 percent). Denmark, at 89 percent, came out on top, while South Korea was at the bottom, at 11 percent.

Figure 10

Respondents expressing confidence that votes were counted accurately in federal elections, 2004–2010



NOTE: Percentages are of respondents who answered they were very confident their votes and votes across the country were counted accurately.

SOURCE: Pew Research Center polls, various dates.

How Partisanship Affects Voter Confidence

Since 2004, the Pew Research Center has asked voters two questions after elections: whether they were confident their vote—and those of others around the country—were accurately counted.[65] Overall, voters' confidence that their votes were counted correctly has remained fairly stable since 2004. Confidence about the national

count's accuracy declined significantly in 2010. (See Figure 10.)

The data reveal a high degree of partisanship in how Republicans and Democrats viewed the integrity of recent federal elections. A Republican won the presidency in 2004, a Democrat in 2008. In 2004, 56.9 percent of Democrats said they were very confident their vote was counted accurately, a rate that rose to 74.8 percent in 2008. For Republicans, the percentage fell from 81.5 percent in 2004 to 74.2 percent in 2008. Reflecting the results of the 2010 congressional elections, Democrats' confidence in the accuracy of the vote count—their own vote and that of voters nationwide—fell significantly. Interestingly, Republicans' confidence in the count dropped as well.

Bigger fluctuations have occurred in how respondents viewed the accuracy of vote counting in other parts of the country than where they live. In 2004, 20.7 percent of Democrats answered that they were very confident that votes in other parts of the nation were counted accurately; that rate climbed to 53.9 percent in 2008 before plummeting to 28.4 percent in 2010. Among Republicans, that confidence has steadily declined, from 75.0 percent very confident in 2004 to 33.6 percent in 2010. Thus, even when one's party is successful electorally, confidence that votes were counted correctly across the country has typically remained low, especially since 2006.

Other Factors Affecting Voter Confidence

In addition to partisanship, confidence in an accurate count is also affected by the voters' experience at the polls. Research on the 2004 election by Alvarez, Hall, and Llewellyn showed that people who voted on paper ballots were more confident their vote was counted as intended than those who voted electronically, using lever machines or punch cards. Absentee voters were less confident than in-person voters.[66] Thus, there are factors that election officials control that affect voter confidence.

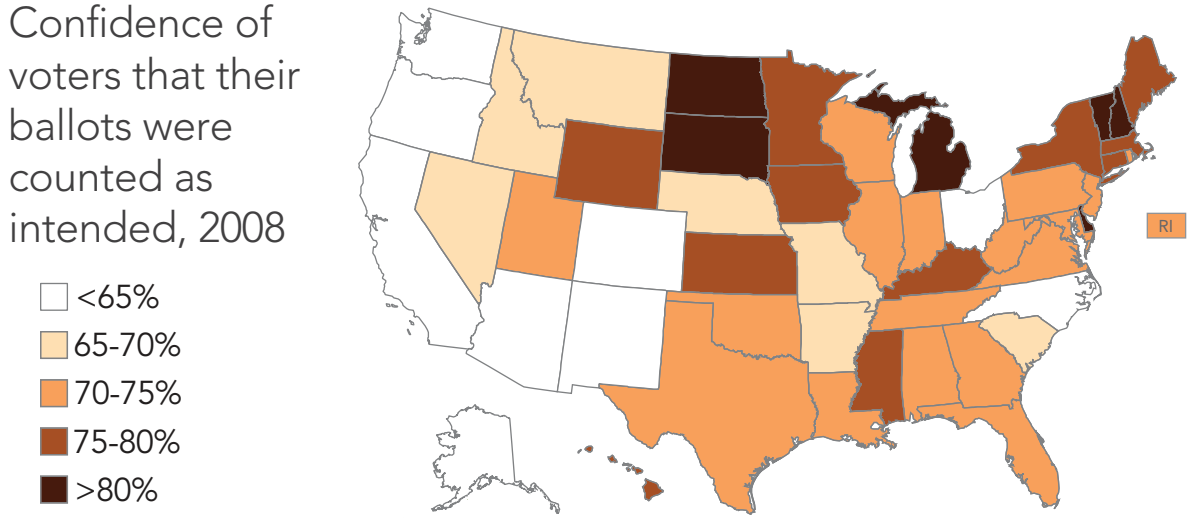
Comparing Voter Confidence Across States

The Survey of the Performance of American Elections (SPAE) in 2008 asked 10,000 respondents, "How confident are you that your vote in the general election was counted as you intended?" Nationwide, 72 percent responded they were "very confident." However, as Figure 11 illustrates, there was significant variation across the states, ranging from 53 percent in Washington to 84 percent in Vermont.

Figure 11 suggests a regional pattern, with the greatest confidence in the northern states and the least in the West. (There are a few notable exceptions, such as relatively high confidence in Utah and low confidence in Ohio.) What accounts for this regional variation? At least part of the explanation may be partisanship.[67] In the

Figure 11

Confidence of voters that their ballots were counted as intended, 2008



NOTE: There are no data for the District of Columbia.
SOURCE: Survey of the Performance of American Elections, 2008.

District of Columbia and the 28 states that were won by Barack Obama in 2008, 80 percent of the Democrats, compared with 65 percent of the Republicans, said they were confident their vote was counted accurately. In the remaining states, which were won by John McCain, Republicans expressed significantly higher levels of confidence.

The data presented in this section suggest a number of patterns:

- **Even when their candidate wins, large numbers of Americans do not think the election system is producing accurate results.** Whether that is a cause for concern and how voter confidence could be improved are matters for public debate.
- **Americans generally have more confidence votes in their own community were counted accurately than votes elsewhere.** This is consistent with studies of how the public views the provision of public services, often rating positively the services they receive while giving more negative evaluations to government in general.
- **Many voters judge the accuracy of vote counts using a partisan lens.** The winner's supporters in the nationwide presidential election will be much more likely to trust that their vote was counted as intended than the loser's supporters.

Section 3. Measuring the Workflow of Elections

In this section, we show how data can be used to examine the practical realities of four aspects of the conduct of elections:

- Domestic civilian absentee ballots
- Overseas civilian and military absentee ballots
- Provisional ballots
- Performance of election technologies and design

We chose to explore the use of data to examine these slices of election administration for three reasons:

- Each topic is the subject of active policy making in many states.
- Administrative performance in each area might benefit from measurement and analysis, given that each topic involves a sequence of actions that must be executed accurately and in a short time by voters and election officials.

DOMESTIC CIVILIAN ABSENTEE BALLOTS

The use and treatment of absentee ballots vary greatly across states. An examination of data reveals enormous variation in the percentage of absentee ballots that are mailed out but never returned to election officials and the percentage of absentee ballots that are returned yet rejected. These data suggest the need for a nonpartisan national discussion about the appropriate role for absentee ballots and about election practices, such as problems with voter lists that may be revealed by these figures.

- Although the relevant data about these topics are not always complete, a large number of local jurisdictions reported the requested information to the EAC or through official reports, so valid nationwide comparisons can be drawn.

Domestic Civilian Absentee Ballots

Absentee voting has increased rapidly over the past 30 years, as some states no longer require people to have a reason to vote in that way rather than going to the polls on Election Day. In 1972, only two states allowed no-excuse absentee voting, but by 2008 the number had grown to 27.[68] Voting absentee increased in 41 states and the District of Columbia from 2000 to 2008.[69] Oregon and Washington now conduct elections completely by mail.

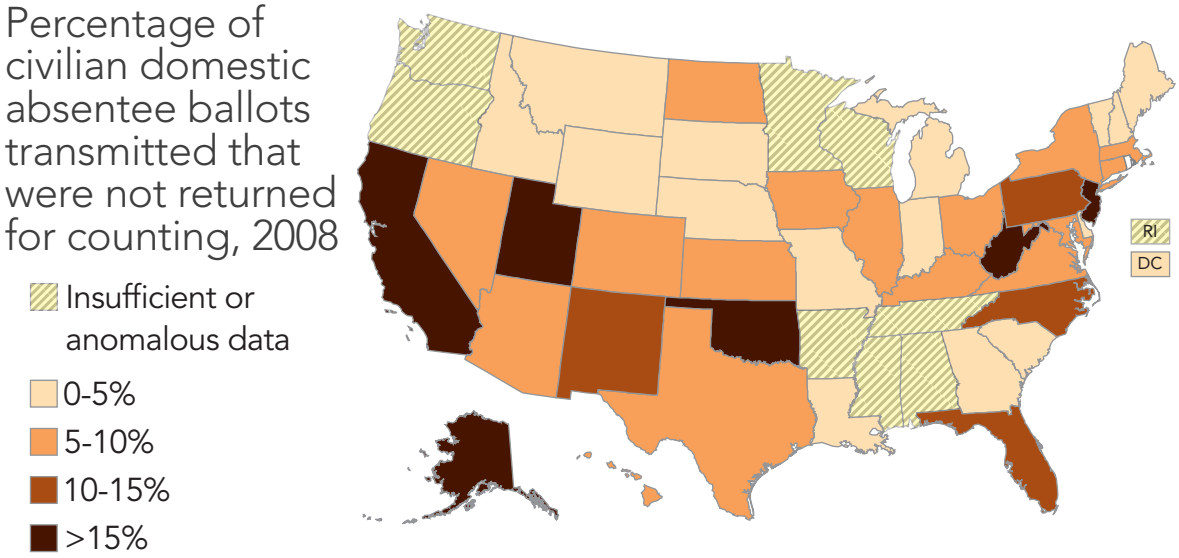
This growth and the many ways it has been implemented across the states raise a number of questions of interest to policy makers who want to improve their absentee-voting systems:

- How many absentee ballots are sent out but never returned? Voters might think they cast a ballot, but are in fact mistaken because it was not received or filled out properly.
- How many absentee ballots are returned but rejected? For what reason?[70] Spikes in rejections might indicate an increase in questionable ballots or greater vigilance against fraud. They might also reveal an effort to disqualify legitimate votes.
- Are local governments willing to provide both the ability to vote by mail and Election Day polling places, given tighter budget constraints? Can costs be brought down by reducing the percentage of non-returned and rejected absentee ballots?

The EAVS data can help policy makers, election officials, and voters better understand how effectively their jurisdiction conducts the absentee-voting process by showing how their numbers compare with others.

Figure 12

Percentage of civilian domestic absentee ballots transmitted that were not returned for counting, 2008



NOTE: Wisconsin and Tennessee were removed from the analysis because of anomalies.
SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

Domestic Absentee Ballots Not Returned

In most states, voters must request an absentee ballot for each election. As shown below, the percentage of these that are not returned varies greatly across states.

Abnormally high rates of unreturned ballots can indicate several problems. Some are not returned because a person decides not to vote, or goes to the precinct location on Election Day to cast a ballot instead. In other cases, the materials or instructions might be unclear, causing a voter to be less likely to successfully return that ballot. If the registration list contains incorrect information, the ballot is less likely to be received by a voter. Some ballots could be lost in transit, but in general the percentage of mail that goes undelivered is miniscule.[71]

Figure 12 maps the percentage of absentee ballots transmitted to voters but not returned to election officials for counting. The map reveals several patterns:

- **Ten states had non-return rates of more than 10 percent,** and two—New Jersey and Utah—had non-return rates of more than 20 percent.
- **Thirty-one states and the District of Columbia had non-return rates below 10 percent.** These include states that make it easy to vote absentee (such as Colorado) and states that make it difficult (such as New York and Delaware).
- **Data were unavailable for nine states.** Two of these states were removed from the analysis because of data anomalies, the remainder because of missing data.[72]

This analysis indicates the need for further investigation. What explains this wide variation in non-return rates, and why are the rates in certain states so high?

- Could it be that certain states have higher percentages of voters who request absentee ballots but then decide not to vote? What could cause such a difference?
- Are preventable administrative errors more common in certain places?
- Are absentee ballots being sent to individuals who did not request them? Why, and what can be done about it?

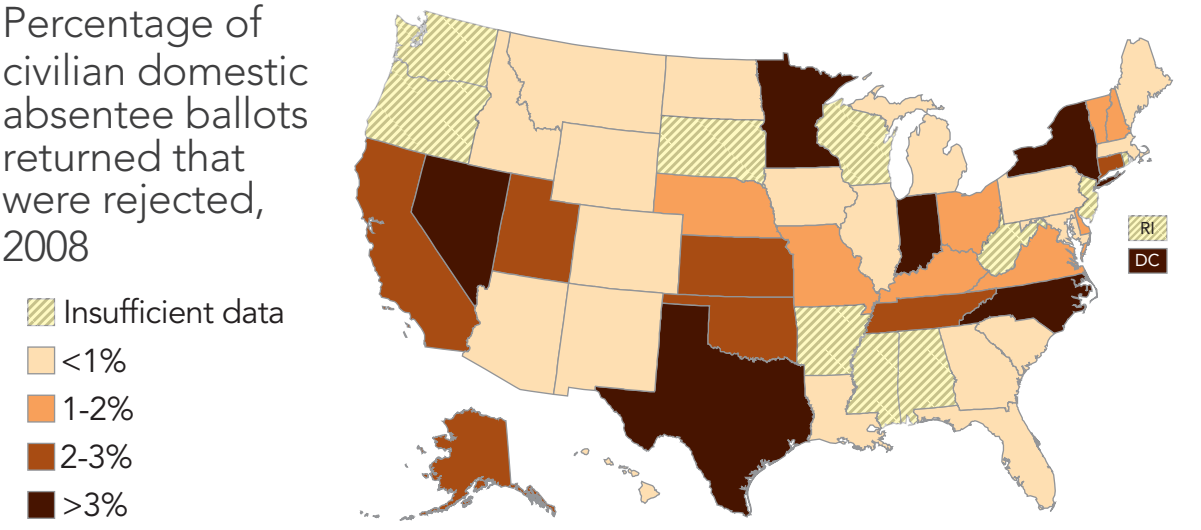
Domestic Absentee Ballots Rejected

Absentee voters typically mail their ballots to an elections office that verifies the voter's eligibility and the ballot's validity. According to the data reported in the EAVS, 1.8 percent of domestic absentee ballots returned for counting were rejected in 2008. Election officials can review the data to identify possible improvements in procedures. For example, why did at least 18 percent of rejected ballots arrive too late? Why did at least 11 percent lack a signature?

A review of the data also reveals a significant need to improve the recordkeeping and reporting that make possible analysis of election administration performance. More than half the rejected ballots reported in the 2008 EAVS were categorized into either the "other" category

Figure 13

Percentage of civilian domestic absentee ballots returned that were rejected, 2008



SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

(34 percent) or left uncategorized (18 percent).[73]

Although the percentage is relatively low, Figure 13 shows rejection rates vary significantly across the states. Policy makers and administrators might want to examine the reasons for their state's variation from others.

Overseas Civilian and Military Ballots

Uniformed service members, as well as overseas civilians and their spouses and dependents, are ensured the right to vote in federal elections under the federal Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA). However, outdated voter registration systems and a patchwork of state absentee ballot laws and procedures have created significant obstacles.[74]

UOCAVA mandates states to report data on military and overseas voter participation. The Military and Overseas Voter Empowerment (MOVE) Act, signed into law in 2009, expanded these requirements.[75] It also spurred many states to pass legislation to improve their UOCAVA voting process.

Two measures can be generated using data from the EAVS that can help election officials determine whether further steps are needed to assist overseas voters. First, the UOCAVA unreturned ballot rate measures problems associated with getting ballots to overseas voters and having them returned in time. Second, the UOCAVA ballot rejection rate helps to measure the degree to which procedures for validating a ballot presents barriers to voters.

OVERSEAS CIVILIAN AND MILITARY BALLOTS

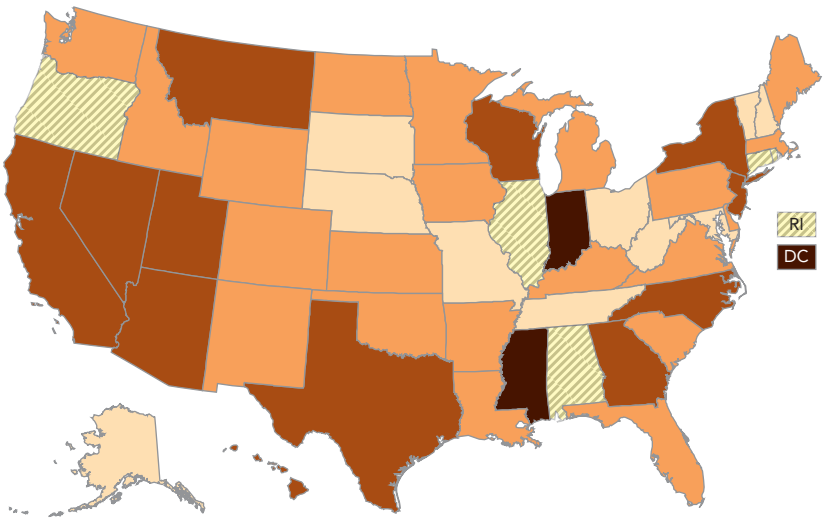
Whether overseas and military voters can request a ballot and have ample time to complete and return it is a test of the strength of American democracy. Currently, UOCAVA voters experience a higher rate of problems receiving and returning ballots than domestic absentee voters. State non-return rates vary from more than 50 percent to less than 20 percent. Data that revealed these problems led to the passage in 2009 of the Military and Overseas Voter Empowerment (MOVE) Act that required states to send ballots for federal elections 45 days before an election. Collection and analysis of accurate data will help ensure that the goals set out in the MOVE Act are achieved.

UOCAVA Ballots Not Returned

UOCAVA voters experience a higher rate of problems receiving and returning ballots than domestic civilian absentee voters.

Figure 14

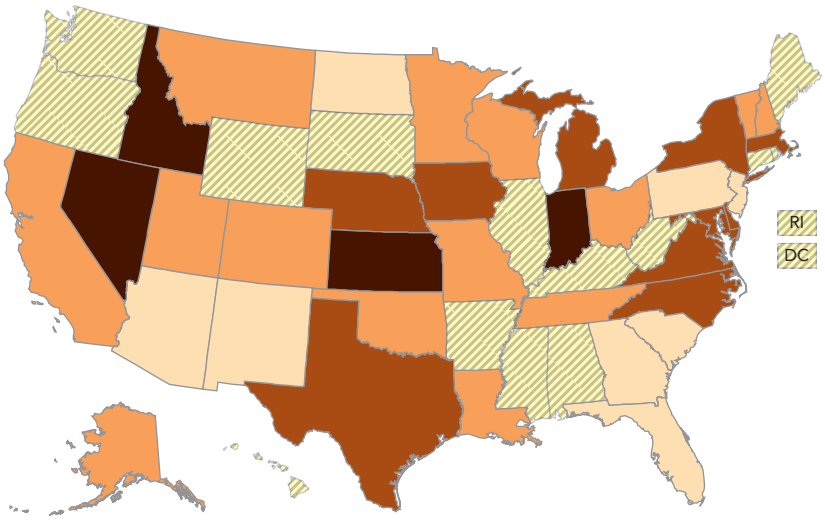
Non-return rates of UOCAVA ballots, 2008



SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

Figure 15

Rejection rates of UOCAVA ballots, 2008



SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

Bob Carey, director of the Federal Voting Assistance Program which helps UOCAVA voters participate in federal elections, cited this as the greatest challenge facing these voters in 2008. "The most significant element of failure in the entire voting process was not registration, was not undeliverable ballots, was not ballots being delivered but rejected, it was ballots being delivered and never returned."[76]

Figure 14 shows the non-return rates for UOCAVA ballots for the states that reported 2008 data to the EAVS. Thirty-five states and the District of Columbia had non-return rates more than 20 percent (with Mississippi over 40 percent and Indiana over 50 percent); 10 states had non-return rates less than 20 percent. Except for Alaska and New Jersey, all states that reported data had higher UOCAVA non-return rates than for domestic absentee ballots.

PROVISIONAL BALLOTS

The 2002 Help America Vote Act (HAVA) mandated that almost every state allow a person to vote provisionally as a fail-safe measure of capturing voters whose registration status remained in question on Election Day. Data regarding how many provisional ballots were submitted as a percentage of a state's total turnout, and how many were rejected as a percentage of total provisional ballots submitted, reveal enormous variation across the country at both the state and county levels. States that issue provisional ballots more freely tend to reject them less frequently, while states issuing few provisional ballots reject a very large percentage of them. These differences could point to potential problems with registration systems as well as to differences in election policies.

UOCAVA Ballots Rejected

UOCAVA voters are far more likely to have their ballots rejected than domestic civilian absentee voters. The U.S. average for rejected UOCAVA ballots in 2008 was nearly 7 percent in the 36 states where reliable data are available. The U.S. average for rejected domestic civilian absentee ballots was approximately 2 percent.

Figure 15 illustrates the variation in this statistic across states. It also shows that 15 states did not report enough data to calculate rejection rates.

The most common reason for rejection is that the ballot was received after the return deadline.[77] Concern about this problem helped spur passage in 2009 of the Military and Overseas Voter Empowerment (MOVE) Act, which requires states to send out ballots for federal elections no later than 45 days before an election. Once the data from the 2010 and 2012 elections are analyzed, we can better determine whether implementing the MOVE Act has made a difference.

Provisional Ballots

Provisional ballots are issued when there are disputes about a voter's eligibility on Election Day. They may be issued to people whose names are not on the voter list, whose registration record is inaccurate, or who do not have proper identification. Provisional ballots are typically kept separate from regular ballots. After the election, the voter's eligibility is verified and the vote either counted or rejected.

In 2002, HAVA mandated that almost all states adopt provisional ballots as a "fail-safe" voting method whenever a person's registration status could not be determined on Election Day.[78] States are given considerable latitude to decide how these ballots will be accepted and counted. Ohio, for example, issued provisional ballots for 13 reasons in 2008, including

change of address within a county. Kentucky allowed registered voters who had moved within a county but had not updated their address before the close of registration to sign an affirmation at the polling place and cast a regular ballot.[79]

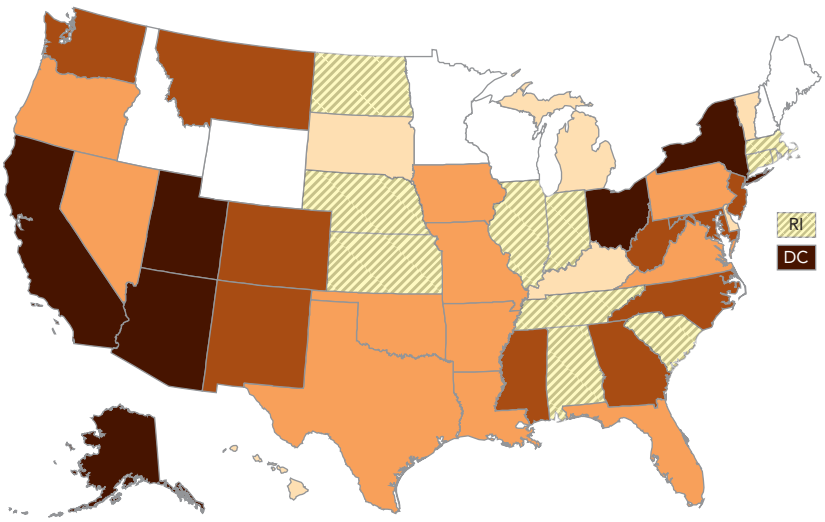
The EAVS began collecting provisional ballot data from states in the 2004 election. Two indicators of election management can be calculated using this information: how many provisional ballots were submitted as a percentage of a state's turnout, and how many were rejected as a percentage of the total submitted.[80]

What can these data reveal about the election process? The great variation across states could arise from the policy choices states have made about how to use provisional ballots. The variation within states between localities that administer the same election laws, but have widely divergent provisional-ballot patterns, might arise from differences caused by counties facing unique factors such as high mobility rates, or by those that are administering state law in different ways.

Because provisional ballots are still new in most of the country, it is difficult to use the numbers alone to determine whether wide disparities at the local level should concern policy makers and the public. Heather Gerken, professor of law at Yale University, has noted that provisional ballots are the "canary" in the election-administration "mine," indicating potential problems with the overall health of the system: "Precisely because provisional ballots offer a fail-safe when the election system breaks down, they provide a warning sign when the system is under stress. After all, if the election system were working perfectly, we would expect precious few provisional ballots to be cast."[81]

Figure 16

Use of provisional ballots, 2008



NOTE: North Dakota does not have voter registration.

SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

Submission Rates for Provisional Ballots

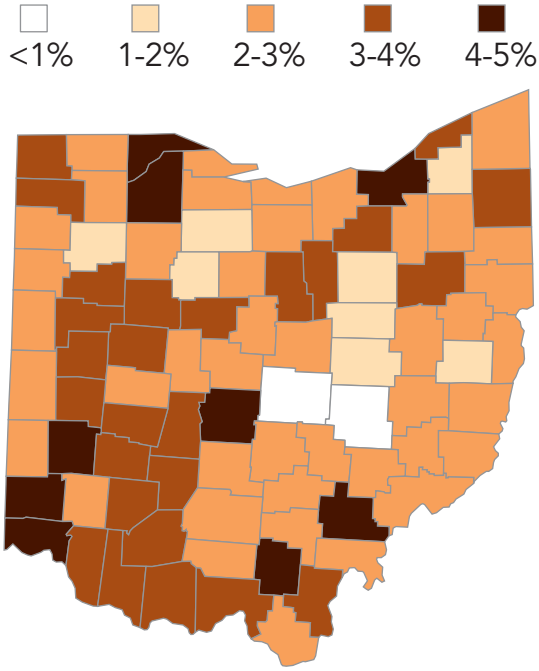
More than two million provisional ballots were submitted nationwide during the 2008 presidential election. Figure 16 reports the percentage of all voters in 2008 casting a provisional ballot. Six states that used Election Day Registration (EDR) in 2008 are indicated in white. North Dakota does not have voter registration. In ten states, a reliable estimate could not be calculated.[82] Among the non-EDR states that reported provisional-ballot use, the usage rates range widely, from 0.01 percent in Vermont to 6.2 percent in Alaska.

The use of provisional ballots within each state also can vary considerably, as shown by Figure 17, which maps the rate of provisional ballot usage in Ohio in 2008. Although Ohio was in the upper end of states in terms of usage that year, some counties (such as Pike County) made almost no use of the procedure. Others (Athens and Franklin Counties) had a rate roughly one-third greater than the state average.

The EAC has recommended that states reduce using provisional ballots by addressing underlying problems before Election Day. "Efforts to improve provisional voting may be most effective as part of a broader effort by state and local election officials to strengthen their systems," the EAC said in a best-practices report. "Collecting and analyzing data about those systems will enable states to identify which aspects of the registration and electoral system cause most voters to end up casting provisional ballots. Election officials can then look to their registration system, identification requirements, or poll worker training as ways to reduce the need for voters to cast provisional ballots."[83]

Figure 17

Provisional ballot use in Ohio, 2008



NOTE: Provisional ballots issued as a percentage of turnout.

SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

Rejection Rates for Provisional Ballots

Of the more than two million provisional ballots submitted in 2008, about 600,000, or approximately 30 percent, were rejected because voters:

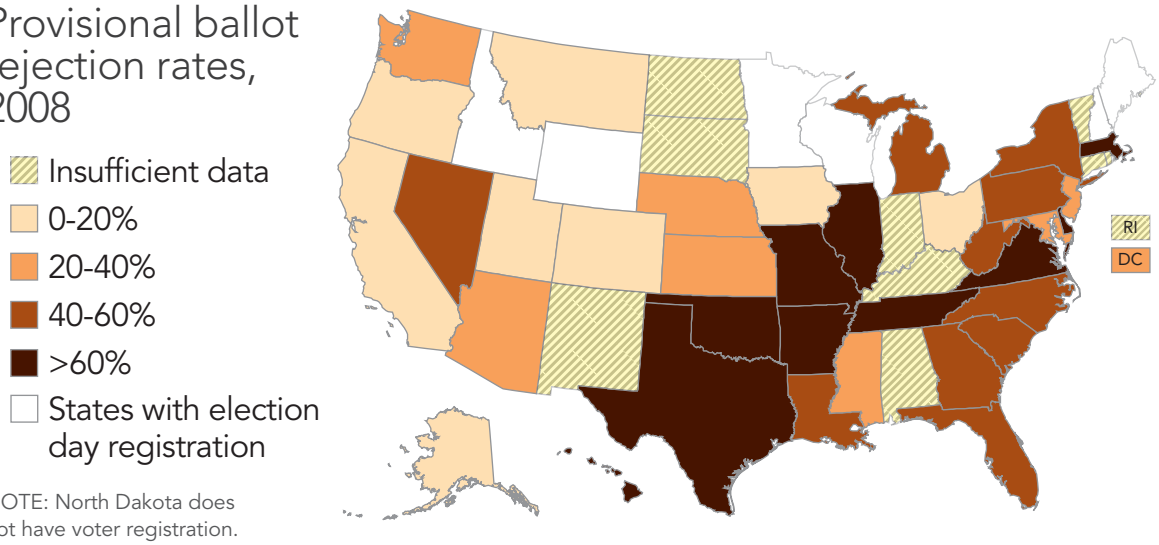
- Assumed they could show up at the polls and cast a provisional ballot without being registered, or while being registered in another county or state.
- Thought they were registered to vote, but their application did not get properly entered into the system, or entered at all.
- Knowingly cast a ballot in the wrong precinct.
- Were provided incorrect information about where to vote, either by a poll worker or a mailing from a local election office.[84]
- Had already cast an early or absentee ballot.
- Had out-of-date information in the voter-registration database.

Figure 18 shows the percentage of provisional ballots rejected in each state. Delaware had the highest rejection rate, at 84.3 percent; the lowest rate was in Alaska, at 1.3 percent.

The data for reasons ballots were rejected in 2008 are less complete than the data about usage, leaving much of the map in Figure 18 marked as having insufficient data. Improved data collection would help pinpoint the greatest number of problems for voters and election officials. Where there are data in the 2008 EAVS, two of the three most common reasons for ballots being rejected are "voter not registered in state" and "ballot cast in wrong precinct."[85]

Figure 18

Provisional ballot rejection rates, 2008



NOTE: North Dakota does not have voter registration.

SOURCE: U.S. Election Assistance Commission, Election Administration and Voting Survey, 2008.

THE PERFORMANCE OF ELECTION TECHNOLOGIES AND DESIGN

One of the best-known measures of the performance of various election technologies in ensuring that a citizen's ballot is counted as intended is the "residual vote." The residual vote rate is calculated by subtracting the number of votes counted from the number of people who cast a ballot. A core goal of HAVA and many state-level efforts at voting-system reform early in the past decade was to eliminate problems caused by voting machines. Data encouraged policy makers to phase out the use of punch card machines to minimize machine-induced voter error. A key measure of HAVA's success is that the residual vote rate nationwide declined significantly between 2000 and 2008.

Streamlining the registration process and better training of poll workers are often cited as ways to reduce ballots rejected for these reasons.[86]

Combining these two measurements—the number of provisional ballots issued and the number rejected—provides a fuller picture of how states approached the use of these ballots in 2008. States that issued provisional ballots more freely tended to reject them less frequently, while states that issued few ballots rejected a large percentage of them.

Some states seemingly have decided to use provisional ballots as an integral part of their election process, issuing a relatively large number of them and eventually accepting the bulk of the ballots cast. Other states have created an environment in which these ballots are regarded as an aberration to be avoided.

The Performance of Election Technologies and Design[87]

Data can help measure the performance of election technologies such as voting machines and the effectiveness of ballot design. This is done by measuring uncounted votes or voting anomalies.

Before the 2000 presidential election, the general assumption was if a person did not vote in a particular race, it was an act of free choice. The election of 2000 taught us otherwise. Problems with pregnant and hanging chad demonstrated that sometimes a "blank" line on a ballot where it appears a voter skipped a particular race—an under-vote—is caused by the failure of a voting technology to properly record a vote.[88] Conversely, the "butterfly ballot" demonstrated that poor ballot designs could confuse voters, misleading them to over-vote or cast votes they did not intend.[89]

Calculating the Residual Vote

The number of residual votes is the sum of over- and under-votes in a particular race. Since jurisdictions rarely report over- and under-votes separately, this number must be calculated by subtracting the total number of votes counted in a race (including write-ins) from turnout. The result is a statistic called the *residual vote*.

Although the residual vote can be calculated for any race, it is most commonly calculated for the race at the top of the ballot, such as president, to avoid contaminating this measure with legitimate abstentions induced by "voter fatigue" further down the ballot.

A core goal of HAVA and many state-level efforts at voting-system reform early in the past decade was to eliminate over-votes and to limit under-votes to those clearly abstaining.

The Residual Vote Rate Defined

The residual vote *rate* is the number of residual votes divided by the total number of voters (i.e., turnout), multiplied by 100 to convert it to a percentage. It is expressed as a formula. (See Box A.)

Box A

RESIDUAL VOTE RATE

$$\frac{\text{Reported Total Turnout} - \text{Total Votes Counted}}{\text{Reported Total Turnout}} \times 100$$

For instance, in the 2008 presidential election, Florida reported that 8,456,329 voters showed up, either on Election Day, in early voting, or through absentee ballots. The official returns report that 4,282,074 were cast for Obama, 4,045,624 for McCain, and 63,046 for other candidates. Thus the residual vote equation would look as it does in Box B.

There were 65,585 ballots with residual votes, a rate of 0.8 percent.

In the weeks immediately after the 2000 presidential election, the residual vote rate was used to show that problems Florida's voters encountered were caused at least in part by their voting machines. This was revealed when the residual vote rate of different types of voting machines varied considerably. The *Orlando Sentinel* reported that among voters in the state who voted on punch cards, which were

Box B

RESIDUAL VOTE RATE: FLORIDA, 2008 PRESIDENTIAL ELECTION

$$\frac{8{,}456{,}329 \text{ (turnout)} - (4{,}282{,}074 + 4{,}045{,}624 + 63{,}046) \text{ (votes counted)}}{8{,}456{,}329 \text{ (turnout)}} \times 100 = \mathbf{0.8\%}$$

prone to hanging chad problems, residual vote rates were 3.9 percent.[90] This was in sharp contrast to the 0.8 percent rate among voters who used optically scanned paper ballots counted in the precinct. On the other hand, when optically scanned ballots were counted in the central election office, not at the precinct, the residual vote rate climbed to 5.7 percent.

Later research associated with the Caltech/MIT Voting Technology Project demonstrated that differences such as these were associated with voting machines nationwide.[91] In part because of how the residual vote measure demonstrated different lost vote rates across different voting machines, HAVA mandated that punch-card machines be phased out. The residual vote rates also led to recommendations that localities using optical scanners do the scanning in the precinct where the votes were cast, and not in the central election office.

Other research focusing on Florida illustrates the value of the residual vote rate as a diagnostic tool to help improve the experience of particular voting populations. One report focused on residual vote rates in the constitutional amendment referendum in Florida that took place concurrently with its 2008 presidential preference primary.[92] In that election, Lake County had one of the lowest residual vote rates (1.8 percent) on the amendment of any county in the state. However, Precinct 98 within Lake County had a 13.5 percent rate. Furthermore, the rate for absentee ballots in the precinct was a whopping 33.9 percent.

Further investigation revealed that 98 percent of the voters in that precinct were over 70 years old—not surprising, since the precinct was in a senior community in Mount Dora. This examination suggests that a higher residual vote rate may have been associated not only with the age of the voters, but with particular features of the absentee voting process that made it particularly likely that older voters would find the ballot difficult to complete.

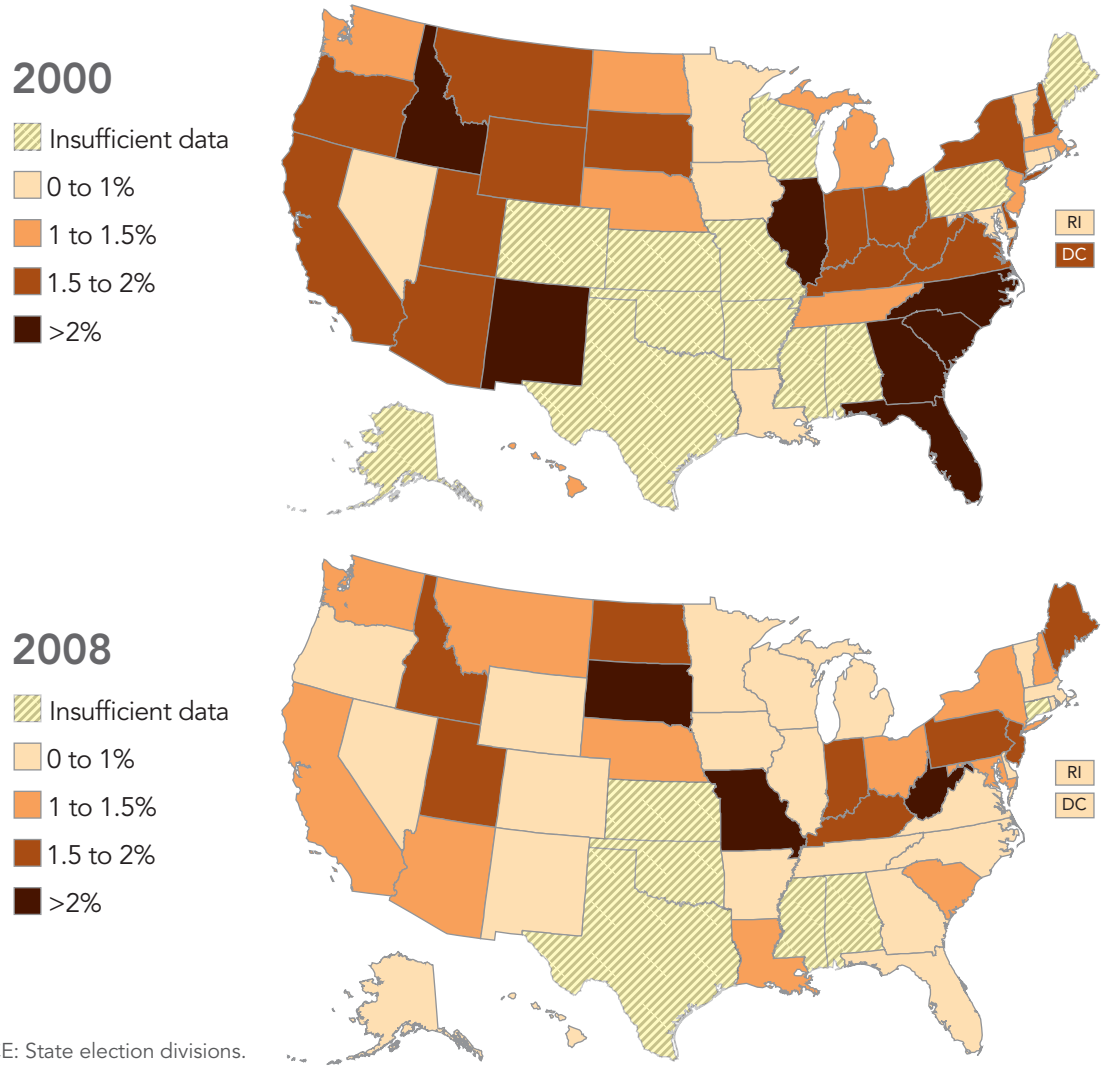
Change in Residual Vote Rate from 2000 to 2008

Figure 19 shows the residual vote rates across states from 2000 and 2008. One measure of HAVA's success is that the rate nationwide has declined since 2000. Because of voting machine changes that were induced by the law, more than one million votes are now counted in each presidential election that otherwise would have been lost to residual vote mistakes.[93]

The cross-hatch shaded areas indicate states that did not report the data (most important, turnout) necessary to calculate the residual vote rate. A comparison of the two years' data shows that the quality of data reported by states has steadily improved.

Figure 19

Residual vote rates, 2000 and 2008



SOURCE: State election divisions.

Conclusion

More than a decade after the troubled 2000 presidential election, more data about election administration are available than ever before.

- States are producing more and better data about their election-administration systems.
- Census data tell us whether, how, when, and why people cast ballots (or did not) in the most recent federal election and allow comparisons across decades.
- The Election Assistance Commission's Election Administration and Voting Survey (EAVS) has proven valuable for tracking data on the process of voting and Election Day activities.
- Other surveys provide data about citizens' voting experience as well as their confidence in the process.
- Expert assessments give us data on elections that would not be available from other sources.

In addition to providing answers to important questions, these sources indicate the need for improvement in systems for voter registration, absentee ballots, military and overseas voting, provisional ballots, and election technologies and design.

At the same time, data collection, reporting, and analysis must be strengthened in order to conduct full performance assessments and truly ground election administration in evidence-based practices. Completeness and consistency vary considerably across states and localities and, given the decentralized nature of our system, we often lack even common terminology and definitions. Although this can be challenging, investments in better data collection today will allow states to make better policy choices that will save money in the future. Further, standard terms and more reliable data would allow states to more easily compare and learn from one another, ultimately helping them run elections more effectively and efficiently.

It will take a joint effort by election officials, policy makers, researchers, and other stakeholders to improve the completeness, accuracy, and use of data to strengthen America's election system and our democracy.

Appendices & Methodology

This section is an addendum to Section 1, and provides a more in-depth look at issues pertaining to election administration data collection and analysis, including:

- The U.S. Election Assistance Commission's Election Administration and Voting Survey.
- The Census Bureau's Current Population Survey, Voting and Registration Supplement.
- The Survey of the Performance of American Elections.
- Pew's *Being Online Is Not Enough* and *Being Online Is Still Not Enough* reports.
- The residual vote rate.
- Analysis of the Voting Age Population, Voting Eligible Population, and turnout for every presidential election since 1960.

Election Administration and Voting Survey

The Election Administration and Voting Survey (EAVS) is conducted every two years by the U.S. Election Assistance Commission (EAC) to gather data from states and counties throughout the United States, including the District of Columbia and four territories (American Samoa, Guam, Puerto Rico, and the Virgin Islands). The survey was first administered after the 2004 election, and was administered again in 2006, 2008, and 2010. The dataset contains statistics reported by county for all states in 2004 and 2006. In 2008, the EAVS began gathering data at the municipality level for the following New England states where elections are administered locally: Connecticut, Maine, Massachusetts, New Hampshire, and Vermont.

The Help America Vote Act (HAVA) provides that "the Commission shall conduct and make available to the public studies regarding [a series of election administration issues], with the goal of promoting methods of voting and administering elections which (1) will be the most convenient, accessible, and easy to use for voters, including members of the uniformed services and overseas voters, individuals with disabilities, including the blind and visually impaired, and voters with limited proficiency in the English language; (2) will yield the most

accurate, secure, and expeditious system for voting and tabulating election results; (3) will be nondiscriminatory and afford each registered and eligible voter an equal opportunity to vote and to have that vote counted; and (4) will be efficient and cost-effective for use."

HAVA lists 18 subjects about which the EAC shall issue reports, including "methods and mechanisms of election technology and voting systems," "methods of voter registration," "methods of conducting provisional voting, "methods of ensuring the accessibility of voting" and "best methods for establishing voting system performance benchmarks, expressed as a percentage of residual vote in the Federal contest at the top of the ballot."[94]

The EAVS also helps the EAC carry out its mandate to gather data about the functioning of the National Voter Registration Act (NVRA) and the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA).

Datasets and reports related to the EAVS, including the Statutory Overview described in Section 1 of this report, can be found at the following EAC Web site: http://www.eac.gov/research/election_administration_and_voting_survey.aspx.

The EAVS has struggled to achieve full compliance from states and localities reporting all the information requested on the survey instrument. Although there was a significant difference in the design of the questionnaire between 2006 and 2008, the 2010 instrument remained predominantly unchanged from 2008 in an effort to improve the survey's "item response rate"—the rate at which those who returned the survey completed each item.[95]

Here we discuss efforts undertaken in this report to deal with item nonresponse to the EAVS survey,[96] along with data anomalies that appeared due to factors such as typographic errors, computational mistakes, and misunderstanding about what data were being requested. Because the EAVS contains so many questions, it is not possible to address item nonresponse for all questions. Instead, we focus on the 15 measures of election-administration workflow discussed in Section 1. The same issues we discuss here would likely face anyone analyzing other items in the EAVS.

Data Cleaning and Coding

Although the EAVS project has had a problem with "unit nonresponse" (states or localities not reporting data), Tables 1 and 2 show that unit nonresponse rates have declined over time, with most counties now reporting basic data.

Nonetheless, there are still missing data for each item on the 2008 survey from some counties. Missing data follow four patterns:

- **A state reports statistics at the state level, but does not provide county data.** This has continued to be true of the New York responses, which contain no county data, even for those statistics, such as overall turnout, that are reported by county on the New York State Board of Election's Web site.
- **The structure of elections within a state precludes the reporting of county-level data for some or all measures.** Alaska, which does not have counties, is a prime example.
- **Data could be missing from state reports for administrative reasons.** For example, data might be missing because some counties do not report a requested statistic, even though most other counties do.
- **No data can be reported regarding a specific election procedure because it does not exist in a state**. For example, there can be no registration statistics from North Dakota since it does not require registration, and there are no provisional-balloting statistics in states exempt from the procedure.

For this report, every effort was made to fill in missing data by contacting state elections divisions and, in a few instances, local election boards. When we calculate summary measures of these statistics, such as the number of provisional ballots issued in a state, we include data reported directly from the states, even if they do not appear in the EAVS. However, when we calculate the "completeness" statistics, which is intended to measure how thoroughly the EAVS captured workflow statistics at the county level, we treat as missing any data we had to obtain from sources other than the EAVS.

Where data were missing or incorrect because of what appeared to be obvious typographical errors, we tried to make the appropriate corrections.

Virtually every data element in the EAVS has "data out of bounds" problems—that is, figures that are logically inconsistent or impossible, at least for a few counties. The raw data were generally released by the EAC "as is," resulting in a few figures that are logically inconsistent or even impossible. Five localities reported in 2008 that they accepted for counting more provisional ballots than were submitted; 86 counties and towns reported more absentee ballots returned than had been transmitted to voters; and 249 counties and towns reported accepting more absentee ballots than had been returned. Most of these discrepancies are small, but some are quite large. For the purpose of

this report, we have removed counties with logically inconsistent values, coding them as missing.

The program file in the statistical package Stata that was necessary to account for all the data discrepancies discussed here required more than 1,500 lines of computer code—more than 20 pages of single-spaced printout. This file is available to researchers who want to replicate our results.

Calculating Completeness Statistics

The decentralized nature of American election administration has created considerable variation in the quality of the data submitted through the EAVS. The collection process can delay public release long enough to limit the data's use in promptly addressing election problems. For instance, the EAVS data related to administration of the 2008 elections were not released until fall 2009.

To analyze the completeness of the EAVS data,[97] some judgments must be made about which components to focus on as the core content of the survey. Federal statutes provide some guidance about what that might be. For instance, UOCAVA requires states to report "on the combined number of absentee ballots transmitted to absent uniformed services voters and overseas voters for the election and the combined number of such ballots which were returned by such voters and cast in the election . . ."[98] The UOCAVA language suggests we should regard basic input and output measures related to election-administration workflow as the data most central to the EAVS's mission.

Thus, we begin by dividing the workflow of elections into five major categories: registration, provisional ballots, turnout, civilian absentee ballots, and UOCAVA absentee ballots. We next identify one or two inputs and outputs that allow us to gauge localities' work running elections, the avenues through which voters attempt to cast their ballots, and how successful they are. The following 15 quantities help provide the most basic answers to questions about election-administration workflow:

1. Registration
   - Number of new registrations received
   - Number of new valid registrations
   - Number of registered voters
2. Provisional ballots
   - Number submitted
   - Number accepted for counting
3. Turnout
   - Number of total ballots cast
   - Number cast in person on Election Day
   - Number cast in person early voting
   - Number cast absentee

4. Civilian absentee ballots
   - Number transmitted to voters
   - Number returned for counting
   - Number accepted for counting
5. UOCAVA absentee ballots
   - Number transmitted to voters
   - Number returned for counting
   - Number accepted for counting

Table 1 and Table 2 show which question numbers on the 2006 and 2008 EAVS related to each of these items.

An examination of Tables 1 and 2 reveals an improvement in the 2008 questionnaire compared to the previous version. In 2006, the questionnaire did not explicitly distinguish between three important stages in administering absentee ballots—the number of requests for ballots received, the number of ballots transmitted to voters because of those requests, and the number of ballots received back that were submitted for counting. The 2008 questionnaire makes this distinction, providing a much clearer view of how both domestic and overseas absentee ballots were handled.

In assessing how thoroughly counties report basic election information to the EAC through the EAVS, it is difficult to distinguish whether a zero was entered to indicate a lack of data or that a count was made and the answer was zero.

For instance, 537 counties are recorded in the 2006 EAVS dataset as having zero registered voters,[99] and 898 counties are recorded as having zero voters coming to the polls. Although counties sometimes will have no voters, those are isolated cases. It is safe to treat these instances as indicating that the data are missing.

On the other hand, many entries in the 2006 EAVS that are reported as zero could plausibly mean zero and not indicate a lack of data. For instance, 917 counties reported that they transmitted precisely zero ballots to overseas military voters in 2006. Which of these counties are "real zeroes" and which indicate missing data? One hint to the answer comes from the 2008 EAVS, in which half as many counties (468) reported that they transmitted zero UOCAVA ballots. This suggests that many counties that reported transmitting no overseas military ballots in 2006 were indicating that they did not have the data, rather than that they had not transmitted any. Also, in 2006, 23 percent of counties with more than 100,000 registered voters reported they transmitted zero ballots to overseas military voters; in 2008, this figure was 0.7 percent. Again, this suggests that in 2006 many counties entered zero to mean they did not have the data.

Table 1

Completeness Statistics for the 2006 EAVS

	Registration			Provisional Ballots		Turnout				Absentee Ballots	UOCAVA Ballots		
	New registrations received	New valid registrations	Registered voters	Provisional ballots submitted	Provisional ballots rejected	Total ballots cast	Ballots cast on Election Day	Ballots cast early voting	Ballots cast absentee	Absentee ballots transmitted	UOCAVA ballots transmitted	UOCAVA ballots returned	Average
Alabama	0%	0%	100%	92%	99%	100%	92%	N/A	0%	0%	0%	0%	**44%**
Alaska	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**
Arizona	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	99%	87%	**90%**
Arkansas	100%	100%	100%	69%	85%	95%	95%	88%	81%	75%	77%	46%	**84%**
California	89%	83%	96%	95%	99%	96%	96%	63%	95%	95%	65%	68%	**87%**
Colorado	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	86%	**99%**
Connecticut	100%	100%	100%	0%	0%	100%	100%	N/A	0%	0%	0%	0%	**45%**
Delaware	100%	100%	100%	100%	100%	100%	100%	N/A	100%	100%	100%	100%	**100%**
Dist. of Columbia	0%	0%	0%	0%	0%	0%	0%	N/A	0%	0%	0%	0%	**0%**
Florida	100%	100%	100%	100%	100%	100%	100%	100%	89%	97%	97%	89%	**98%**
Georgia	100%	100%	100%	100%	98%	100%	100%	100%	100%	100%	100%	100%	**100%**
Hawaii	100%	86%	100%	100%	100%	100%	100%	100%	100%	100%	100%	88%	**98%**
Idaho	100%	100%	100%	N/A	N/A	100%	100%	100%	100%	100%	100%	100%	**100%**
Illinois	99%	96%	100%	92%	94%	100%	99%	80%	18%	49%	47%	37%	**76%**
Indiana	100%	100%	100%	98%	97%	100%	100%	N/A	99%	100%	100%	99%	**99%**
Iowa	0%	0%	100%	0%	40%	0%	0%	N/A	0%	0%	0%	0%	**13%**
Kansas	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	100%	0%	**75%**
Kentucky	0%	0%	100%	0%	100%	0%	0%	N/A	0%	100%	7%	0%	**28%**
Louisiana	100%	100%	100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	**100%**
Maine	100%	100%	100%	N/A	N/A	100%	100%	N/A	100%	100%	0%	0%	**78%**
Maryland	100%	100%	100%	0%	0%	100%	0%	N/A	0%	0%	0%	0%	**36%**
Massachusetts	80%	0%	100%	15%	6%	100%	15%	N/A	0%	6%	0%	0%	**29%**
Michigan	100%	100%	100%	100%	100%	100%	100%	N/A	100%	100%	100%	100%	**100%**
Minnesota	0%	100%	100%	N/A	N/A	100%	100%	N/A	0%	0%	100%	100%	**67%**
Mississippi	72%	35%	97%	69%	68%	98%	78%	N/A	67%	60%	57%	60%	**69%**
Missouri	100%	100%	100%	100%	100%	100%	100%	N/A	100%	100%	100%	100%	**100%**
Montana	100%	100%	100%	100%	100%	100%	100%	N/A	100%	100%	100%	100%	**100%**
Nebraska	100%	100%	100%	98%	89%	100%	100%	N/A	100%	99%	5%	82%	**89%**
Nevada	96%	96%	100%	100%	98%	100%	100%	100%	99%	97%	96%	98%	**98%**
New Hampshire	0%	0%	0%	N/A	N/A	100%	100%	N/A	0%	0%	0%	0%	**22%**
New Jersey	89%	84%	100%	84%	89%	91%	91%	N/A	85%	67%	62%	91%	**85%**
New Mexico	85%	62%	100%	29%	57%	100%	43%	43%	55%	46%	46%	49%	**59%**
New York	0%	0%	0%	0%	0%	0%	0%	N/A	0%	0%	0%	0%	**0%**
North Carolina	100%	16%	100%	100%	100%	100%	100%	100%	99%	86%	100%	100%	**92%**
North Dakota	N/A	N/A	N/A	100%	86%	100%	100%	N/A	100%	100%	100%	100%	**98%**
Ohio	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	**99%**
Oklahoma	100%	100%	100%	97%	98%	100%	100%	100%	100%	100%	0%	0%	**83%**
Oregon	100%	100%	100%	100%	100%	100%	N/A	N/A	0%	100%	0%	0%	**70%**
Pennsylvania	100%	100%	100%	0%	0%	95%	68%	N/A	0%	75%	0%	0%	**49%**
Rhode Island	100%	100%	100%	0%	6%	100%	100%	N/A	100%	100%	100%	0%	**73%**
South Carolina	99%	4%	100%	75%	61%	100%	100%	N/A	99%	100%	99%	96%	**85%**
South Dakota	95%	84%	100%	100%	76%	100%	97%	73%	54%	61%	58%	45%	**79%**
Tennessee	100%	100%	100%	0%	77%	0%	0%	0%	0%	62%	34%	0%	**39%**
Texas	100%	100%	100%	99%	79%	100%	100%	100%	98%	87%	64%	98%	**94%**
Utah	94%	50%	100%	99%	98%	100%	100%	100%	99%	99%	58%	87%	**90%**
Vermont	0%	0%	100%	100%	0%	0%	0%	N/A	0%	0%	0%	0%	**18%**
Virginia	0%	0%	100%	91%	75%	100%	100%	N/A	100%	100%	100%	100%	**79%**
Washington	68%	51%	100%	100%	98%	100%	100%	N/A	100%	96%	45%	31%	**81%**
West Virginia	100%	0%	100%	68%	85%	91%	86%	87%	75%	62%	48%	55%	**71%**
Wisconsin	0%	0%	100%	N/A	N/A	0%	0%	N/A	0%	0%	0%	0%	**11%**
Wyoming	58%	100%	100%	N/A	N/A	100%	100%	N/A	66%	92%	73%	68%	**84%**
U.S. average	**76%**	**69%**	**94%**	**73%**	**75%**	**86%**	**79%**	**83%**	**62%**	**69%**	**58%**	**54%**	**72%**

Table 2

Completeness Statistics for the 2008 EAVS

	Registration			*Provisional Ballots*		*Turnout*			
	New registrations received	New valid registrations	Registered voters	Provisional ballots submitted	Provisional ballots accepted	Total ballots cast	Ballots cast on Election Day	Ballots cast early voting	Ballots cast absentee
Alabama	100%	100%	100%	74%	0%	100%	0%	N/A	0%
Alaska	100%	100%	100%	100%	100%	100%	100%	100%	100%
Arizona	100%	100%	100%	100%	100%	100%	100%	95%	100%
Arkansas	0%	0%	100%	94%	88%	94%	94%	94%	38%
California	100%	82%	100%	100%	90%	100%	100%	57%	99%
Colorado	100%	100%	100%	98%	98%	100%	100%	100%	100%
Connecticut	100%	100%	100%	100%	99%	100%	100%	N/A	100%
Delaware	100%	100%	100%	100%	100%	100%	100%	N/A	100%
Dist. of Columbia	0%	0%	100%	100%	100%	100%	100%	N/A	100%
Florida	100%	100%	100%	100%	100%	100%	100%	100%	100%
Georgia	100%	100%	100%	100%	100%	100%	100%	100%	100%
Hawaii	100%	100%	100%	100%	100%	100%	100%	100%	15%
Idaho	100%	0%	100%	N/A	N/A	100%	100%	N/A	100%
Illinois	93%	98%	0%	99%	99%	79%	0%	0%	0%
Indiana	100%	100%	100%	66%	65%	100%	100%	100%	0%
Iowa	0%	100%	100%	100%	100%	100%	100%	N/A	100%
Kansas	100%	100%	100%	100%	100%	100%	100%	0%	0%
Kentucky	0%	0%	100%	100%	100%	100%	100%	N/A	100%
Louisiana	100%	100%	100%	100%	100%	100%	100%	100%	100%
Maine	100%	100%	100%	N/A	N/A	100%	100%	N/A	0%
Maryland	0%	100%	100%	100%	100%	100%	100%	N/A	100%
Massachusetts	0%	0%	100%	100%	100%	100%	0%	N/A	0%
Michigan	100%	100%	100%	100%	100%	100%	100%	N/A	100%
Minnesota	100%	100%	100%	N/A	N/A	100%	100%	N/A	100%
Mississippi	48%	36%	55%	47%	43%	51%	40%	N/A	35%
Missouri	100%	99%	100%	100%	94%	100%	94%	N/A	93%
Montana	100%	100%	100%	100%	97%	100%	100%	N/A	100%
Nebraska	100%	100%	100%	100%	100%	100%	100%	N/A	100%
Nevada	100%	100%	100%	100%	100%	100%	100%	100%	100%
New Hampshire	0%	0%	100%	N/A	N/A	0%	0%	N/A	100%
New Jersey	100%	100%	100%	100%	100%	100%	100%	N/A	100%
New Mexico	75%	34%	78%	73%	30%	71%	71%	71%	54%
New York	0%	0%	0%	0%	0%	0%	0%	N/A	0%
North Carolina	100%	100%	100%	100%	100%	100%	100%	100%	100%
North Dakota	N/A	N/A	N/A	100%	100%	100%	100%	N/A	100%
Ohio	98%	87%	100%	100%	96%	99%	100%	81%	96%
Oklahoma	100%	100%	100%	100%	100%	100%	100%	100%	100%
Oregon	100%	100%	100%	100%	77%	100%	N/A	N/A	0%
Pennsylvania	100%	100%	100%	100%	100%	100%	100%	N/A	100%
Rhode Island	0%	0%	100%	100%	100%	0%	100%	N/A	0%
South Carolina	100%	100%	100%	92%	92%	100%	100%	N/A	100%
South Dakota	75%	67%	100%	100%	100%	100%	94%	34%	81%
Tennessee	100%	100%	100%	100%	100%	100%	100%	100%	0%
Texas	100%	100%	100%	99%	98%	98%	99%	96%	82%
Utah	100%	100%	100%	97%	97%	100%	100%	100%	0%
Vermont	100%	100%	100%	100%	100%	100%	100%	N/A	100%
Virginia	100%	100%	100%	100%	100%	100%	100%	N/A	100%
Washington	97%	0%	100%	100%	61%	100%	100%	N/A	100%
West Virginia	77%	66%	100%	83%	81%	100%	90%	100%	80%
Wisconsin	100%	0%	100%	N/A	N/A	100%	100%	N/A	100%
Wyoming	100%	100%	100%	N/A	N/A	100%	100%	N/A	100%
U.S. average	**79%**	**75%**	**95%**	**94%**	**89%**	**92%**	**88%**	**83%**	**72%**

(continued)

Table 2

Completeness Statistics for the 2008 EAVS

(continued)	*Absentee Ballots*			*UOCAVA Ballots*			Average
	Absentee ballots transmitted	Absentee ballots returned	Absentee ballots accepted	UOCAVA ballots transmitted	UOCAVA ballots returned	UOCAVA ballots accepted	
Alabama	100%	0%	0%	100%	0%	0%	**46%**
Alaska	100%	100%	100%	100%	100%	100%	**100%**
Arizona	100%	100%	100%	100%	100%	98%	**100%**
Arkansas	90%	60%	84%	93%	91%	75%	**76%**
California	100%	100%	100%	100%	100%	77%	**94%**
Colorado	100%	100%	100%	100%	100%	75%	**98%**
Connecticut	100%	78%	100%	100%	0%	0%	**86%**
Delaware	100%	100%	100%	100%	100%	100%	**100%**
Dist. of Columbia	100%	100%	100%	100%	100%	0%	**75%**
Florida	100%	100%	100%	100%	100%	51%	**97%**
Georgia	100%	100%	100%	100%	100%	100%	**94%**
Hawaii	100%	94%	94%	100%	82%	82%	**92%**
Idaho	100%	100%	100%	100%	100%	100%	**93%**
Illinois	100%	99%	99%	0%	0%	38%	**53%**
Indiana	100%	100%	100%	100%	100%	29%	**85%**
Iowa	100%	100%	100%	100%	100%	74%	**91%**
Kansas	100%	100%	99%	99%	95%	96%	**88%**
Kentucky	100%	96%	100%	100%	100%	1000	**81%**
Louisiana	100%	100%	100%	100%	100%	100%	**100%**
Maine	100%	100%	100%	100%	100%	93%	**91%**
Maryland	100%	100%	100%	100%	100%	100%	**94%**
Massachusetts	100%	100%	100%	100%	100%	68%	**67%**
Michigan	100%	100%	100%	100%	100%	6%	**94%**
Minnesota	55%	100%	100%	100%	100%	72%	**95%**
Mississippi	47%	39%	40%	50%	46%	28%	**44%**
Missouri	100%	94%	94%	100%	100%	78%	**96%**
Montana	100%	100%	100%	100%	100%	100%	**100%**
Nebraska	100%	100%	100%	100%	100%	99%	**100%**
Nevada	100%	100%	100%	100%	100%	97%	**100%**
New Hampshire	100%	100%	100%	100%	100%	100%	**64%**
New Jersey	100%	100%	98%	100%	100%	100%	**94%**
New Mexico	73%	68%	69%	76%	73%	50%	**65%**
New York	0%	0%	0%	0%	0%	0%	**0%**
North Carolina	100%	100%	100%	100%	100%	100%	**100%**
North Dakota	100%	100%	100%	100%	100%	100%	**100%**
Ohio	98%	94%	98%	100%	98%	69%	**95%**
Oklahoma	100%	100%	100%	100%	100%	27%	**96%**
Oregon	100%	2%	100%	100%	0%	0%	**72%**
Pennsylvania	100%	100%	100%	100%	100%	100%	**94%**
Rhode Island	100%	0%	100%	100%	0%	100%	**56%**
South Carolina	100%	100%	0%	100%	100%	100%	**93%**
South Dakota	100%	100%	86%	93%	84%	56%	**86%**
Tennessee	100%	100%	100%	100%	100%	90%	**88%**
Texas	96%	95%	95%	100%	100%	45%	**94%**
Utah	100%	99%	99%	100%	100%	100%	**92%**
Vermont	100%	100%	100%	100%	100%	88%	**99%**
Virginia	100%	100%	100%	100%	100%	100%	**100%**
Washington	0%	0%	100%	100%	100%	28%	**74%**
West Virginia	82%	80%	75%	85%	77%	34%	**82%**
Wisconsin	100%	0%	100%	100%	99%	37%	**74%**
Wyoming	100%	100%	100%	100%	100%	100%	**100%**
U.S. average	**79%**	**75%**	**95%**	**94%**	**89%**	**92%**	**85%**

Current Population Survey's Voting and Registration Supplement

The Voting and Registration Supplement (VRS) is a feature of the Current Population Survey (CPS), conducted immediately after each biennial federal election. The CPS is a monthly study of approximately 50,000 households that the Census Bureau has conducted for approximately 50 years. The sample is designed to represent the non-institutionalized civilian population of the United States. The primary purpose of the CPS is to gather information about the U.S. workforce. The VRS, which has been conducted since 1964, gathers basic information about whether respondents who are eligible to vote did so in the most recent federal election and, if not, why not.

Micro-data from November 1994 to the present can be downloaded through the Census Bureau's DataFerrett service.[100] Earlier data are available through the Inter-University Consortium for Political and Social Research (ICPSR).

Table 3

EAVS Survey Items Included in Completeness Calculations, 2006 (Table 1) and 2008 (Table 2)

These items correspond to the following EAVS variable labels for 2006 and 2008.	2006 EAVS Variable Label	2008 EAVS Variable Label
Registration		
Number of new registrations received	q04total	a5a
Number of new valid registrations	q09total	q5b
Number of registered voters	q022006total	a1
Provisional ballots		
Number of provisional ballots submitted	q33p	e1
Number of provisional ballots accepted for counting	q36total**	e2a
Turnout		
Number of total ballots cast	q33total	f1a
Number of ballots cast in person on Election Day	q33a	f1b
Number of ballots cast in person early voting	q33e	f1f
Number of ballots cast absentee	q33dc*	f1c+f1d
Civilian absentee ballots		
Number of absentee ballots transmitted to voters	q38dc	c1a
Number of absentee ballots returned and submitted for counting	q33dc*	c1b
Number of absentee ballots accepted for counting	q33dc*	c4a
UOCAVA absentee ballots		
Number of absentee ballots transmitted to voters	q39om+q39oc	b1a
Number of absentee ballots returned and submitted for counting	q33om+q33oc*	b2a
Number of absentee ballots accepted for counting	q33om+q33oc*	b8

The weighting variable provided by Census was "PWCMPWGT", which is the "weight-composited final weight." In conducting our analysis, we used this weight while collapsing the data at the statewide level.

Survey of the Performance of American Elections

The Survey of the Performance of American Elections (SPAE) was an Internet-based survey of 10,000 registered voters—200 from each state—conducted during the week immediately after the 2008 presidential election. The survey focused on the voting experience. The survey was supported by the Pew Center on the States, under the Make Voting Work Initiative, along with the JEHT Foundation, and the AARP.

Registered voters were asked whether they voted in 2008. If they did not, they were asked several questions about why not. If they did vote, respondents were asked how they voted (in-person on Election Day, in-person early voting, or absentee/mail voting), and then a series of questions about their experience. Data and the final report can be downloaded here: http://dspace.mit.edu/handle/1721.1/49847.

One of the survey's goals was to develop standardized questions about election administration that could be used across surveys in other settings. The questions were piloted in two surveys that preceded the 2008 presidential election: in the 2007 gubernatorial elections in Kentucky, Louisiana, and Mississippi, and in the February 2008 "Super Tuesday" primaries held in 15 states. The same questionnaire was used to study the 2009 gubernatorial elections in New Jersey and Virginia.

While these tests were useful in developing standardized questions, comparisons of results are best made for the same type of elections—for example, two presidential elections, or the 2008 SPAE compared to the 2008 Cooperative Congressional Election Study (CCES). The intensity of activity at the polls and in county election offices might vary too much for two kinds of elections to make a valid comparison.

Being Online Is Still Not Enough

In 2011, Pew issued an assessment of state election Web sites, conducted in collaboration with the California Voter Foundation, Center for Governmental Studies, and Nielsen Norman Group. *Being Online Is Still Not Enough* evaluated the content, usability, and availability of lookup tools for the voting information Web sites of all 50 states and the District of Columbia, scoring them on their performance and suggesting ways for each state to better inform voters online.

The study followed a 2008 assessment, *Being Online Is Not Enough*.[101]

Leading up to the 2010 election, the assessment covered three major categories:

content, lookup tools, and usability. The project assigned 50 percent of the total score to content, including information on registering to vote, items on the ballot, casting a ballot, absentee and early voting, military and overseas voting, and contacting election officials.

The project assigned 25 percent of the total score to the availability of lookup tools that allow voters to check their polling place location, ballot information, and the status of their voter registration, provisional ballot, or absentee ballot.

Finally, even the best information is of no value if users cannot find it easily or at all, so the last 25 percent of the total potential score was assigned to the usability of the Web site. The analysis scored each site on how easy it is to find the site, navigate and search within it, understand the terms that are used, and access it even if the user has disabilities.

Residual Vote Rate

The residual vote rate is defined using the equation shown in Box C.

Although the residual vote rate can be calculated for any race on the ballot, it has become conventional to use top-of-the-ballot races to measure voting-technology performance. The quadrennial presidential election provides the best opportunity to compare states because the same race is used as a point of comparison.

Box C

RESIDUAL VOTE RATE

$$\frac{\text{Reported Total Turnout} - \text{Total Votes Counted}}{\text{Reported Total Turnout}} \times 100$$

Turnout and vote-count statistics were gathered for this report directly from state election divisions. The residual vote rate can only be calculated for states that report turnout as a separate statistic, distinguishing it from the number of legal ballots cast for a candidate. In 2008, six states did not report turnout rates, or did so inconsistently across counties, making the calculation impossible.

State Voting Age Population, Voting Eligible Population, and Turnout

Voting Age Population

The Voting Age Population (VAP) is the residential population of a state that has reached legal voting age, which has been 18 years old nationwide since the ratification of the 26th Amendment to the U.S. Constitution in 1971. The Census Bureau is required by law to report projections of the VAP to the Federal Election Commission every year.[102]

The Current Population Survey's P20 Population Reports contain the data to prepare statewide turnout figures and statistics on voting age populations. Scanned PDF documents of the Census

statewide VAP estimates from 1960-1976 can be found here: http://www.census.gov/population/www/socdemo/voting/past-voting.html#cps. More recent VAP reports are here: http://www.census.gov/hhes/www/socdemo/voting/index.html.

Voting Eligible Population

The Voting Eligible Population (VEP) adjusts VAP to take into account the number of ineligible voters among the resident population, reflecting estimates of people of voting age who are not U.S. citizens, or who are ineligible because of incarceration or prior felony conviction. The VEP statistic is calculated by Michael McDonald, a professor of political science at George Mason University.[103] Data for turnout, the voting age population, and the voting eligible population for every biennial election from 1980 to the present can be downloaded in .xls format through his Web site: http://elections.gmu.edu/voter_turnout.htm.

The available data are insufficient to calculate the VEP by state before 1980. VEP estimates using the pre-1980s data have been made only for the national and regional levels, not by county.

More information regarding the calculation of VEP and related issues is here: http://elections.gmu.edu/FAQ.html#How%20to%20VEP.

Turnout (prior to 2000)

Consistent turnout and election-return data for elections before 2000 are difficult to acquire directly from state election divisions. Two secondary sources, each based on official returns, are the sources for turnout data prior to 2000. The first is the *America Votes* series, compiled by Richard Scammon since 1956. We validated the *America Votes* data against those contained in David Leip's *Atlas of U.S. Presidential Elections* (www.uselectionatlas.org), which also is based on official election returns.

Table 4

Data in Tabular Form

	Figure 2	Figure 3	Figure 5a	Figure 5b	Figure 6	Figure 7a	Figure 7b	Figure 8a	Figure 8b
	Usage of vote-by-mail in the 2008 election	Illness/disability as a reason for not voting, 2000-2010	Completeness of data report in the 2006 EAVS among 15 core measures	Completeness of data report in the 2008 EAVS among 15 core measures	Average time waiting to vote, 2008	Voter registration rates based on state-reported active registrations and population estimates	Voter registration rates based on responses to the VRS	Voter turnout rates based on election returns and population estimates	Voter turnout rates based on responses to the VRS
Alabama	2.2	20.8	44.0	45.9	14.5	82.1	85.2	61.4	73.2
Alaska	9.6	12.4	100.0	100.0	5.8	102.9	87.6	68.0	75.5
Arizona	44.8	10.5	90.4	99.6	22.7	71.7	82.9	55.7	68.3
Arkansas	2.8	16.4	84.1	75.8	21.7	66.1	74.2	53.1	59.5
California	38.6	13.0	86.8	94.4	13.6	78.5	82.5	61.8	75.2
Colorado	58.9	10.8	98.7	98.1	12.6	77.4	84.0	70.8	78.6
Connecticut	4.7	18.3	45.5	86.1	10.4	85.6	85.5	67.4	76.8
Delaware	3.5	17.6	100.0	100.0	12.4	90.4	85.9	66.7	76.8
Dist. of Columbia	12.7	19.6	0.0	75.0		99.1	90.9	62.0	85.0
Florida	19.1	15.6	97.6	97.1	29.0	89.7	87.7	67.4	77.9
Georgia	7.6	14.2	99.8	94.1	37.9	81.3	84.9	61.9	75.3
Hawaii	24.4	12.1	97.8	92.2	5.7	58.7	69.6	50.7	59.4
Idaho	19.8	13.9	100.0	92.9	6.5	83.8	77.1	64.9	66.4
Illinois	3.8	15.9	75.8	53.1	9.2	86.9	85.2	63.8	74.1
Indiana	6.3	14.8	99.5	84.7	24.2	89.2	81.1	60.5	71.5
Iowa	18.6	10.8	12.7	91.2	5.1	90.9	85.3	70.2	77.1
Kansas	18.0	14.3	75.0	87.5	11.0	79.2	77.2	62.0	69.1
Kentucky	2.8	19.9	27.9	81.0	12.5	92.1	83.1	59.0	70.2
Louisiana	2.2	19.0	99.8	100.0	19.1	84.6	88.0	61.8	78.3
Maine	15.8	12.1	77.8	90.7	4.4	95.7	86.5	72.2	76.7
Maryland	6.6	16.5	36.4	93.8	24.7	88.0	87.0	68.2	79.4
Massachusetts	5.7	19.8	29.3	66.7	5.6	83.1	87.0	66.4	79.0
Michigan	21.1	13.7	100.0	94.1	20.6	102.2	90.4	68.9	78.6
Minnesota	6.8	12.6	66.7	94.7	8.6	92.7	91.8	78.0	85.1
Mississippi	5.9	18.7	69.1	44.2	11.1	49.2	86.8	61.2	78.6
Missouri	4.5	15.9	100.0	96.5	26.6	86.6	85.5	68.7	74.2
Montana	25.6	12.7	100.0	99.5	6.2	76.3	80.2	68.1	72.2
Nebraska	15.2	8.9	88.5	99.9	9.3	91.5	82.7	64.2	73.8
Nevada	7.2	10.0	98.2	99.8	12.7	73.2	77.6	58.8	68.0
New Hampshire	5.7	14.0	22.2	64.3	7.5	95.8	84.3	71.9	78.6
New Jersey	5.3	15.5	84.7	93.7	7.4	85.4	85.5	67.9	75.7
New Mexico	18.7	16.6	59.5	65.5	12.4	55.2	80.8	62.0	71.7
New York	4.0	15.8	0.0	0.0	8.7	82.6	83.9	58.6	72.8
North Carolina	5.6	15.6	91.8	100.0	21.3	89.7	84.5	66.8	74.1
North Dakota	16.4	8.9	98.2	100.0	5.3		88.9	65.3	71.7
Ohio	22.1	14.0	98.6	94.8	15.6	64.5	84.4	67.5	75.0
Oklahoma	3.5	17.0	83.0	95.7	22.7	72.4	81.1	56.3	66.9
Oregon	100.0	7.3	70.0	71.9		79.5	85.0	68.1	77.9
Pennsylvania	3.6	15.0	48.9	93.7	14.7	83.3	81.3	64.3	72.1
Rhode Island	3.9	20.6	73.2	56.3	5.2	85.7	84.2	62.4	74.3
South Carolina	9.7	19.5	84.9	92.6	62.1	77.8	80.6	59.1	69.6
South Dakota	8.6	8.9	78.6	86.4	3.9	89.0	83.6	65.0	72.8
Tennessee	2.2	16.8	39.4	87.7	19.6	80.4	80.3	57.4	67.9
Texas	4.9	12.3	93.8	94.1	12.2	78.7	79.5	54.5	64.3
Utah	7.9	13.2	90.3	91.9	13.9	76.9	75.8	55.6	66.1
Vermont	15.8	12.7	18.2	99.2	2.5	89.1	83.4	67.7	72.7
Virginia	4.5	15.2	78.7	100.0	28.2	89.0	87.3	68.0	78.5
Washington	85.3	6.1	80.9	74.1		79.5	84.2	67.3	77.3
West Virginia	1.9	19.7	71.4	82.2	15.1	82.5	78.2	52.4	62.7
Wisconsin	11.4	14.3	11.1	73.9	7.9	90.8	86.9	72.5	79.8
Wyoming	12.7	13.2	84.2	100.0	5.6	62.0	78.4	65.2	71.6

(continued)

Table 4

Data in Tabular Form

(continued)

	Figure 9	Figure 11	Figure 12	Figure 13	Figure 14	Figure 15	Figure 16	Figure 18	Figure 19a	Figure 19b
	Voter turnout rates, 1960 election	Confidence of voters that their votes were counted as intended, 2008	Percentage of civilian domestic absentee ballots transmitted not returned for counting, 2008	Percentage of civilian domestic absentee ballots returned that were rejected, 2008	Non-return rates of UOCAVA ballots, 2008	Rejection rates of UOCAVA ballots, 2008	Use of provisional ballots, 2008	Provisional ballot rejection rates, 2008	Residual vote rates, 2000	Residual vote rates, 2008
Alabama	30.9	74.4								
Alaska	45.3	62.9	16.5	2.1	15.5	4.5	6.2	1.3		0.3
Arizona	52.8	58.1	6.4	0.6	36.6	1.9	4.6	29.3	1.6	1.2
Arkansas	40.9	70.0			29.5		0.1	64.3		0.9
California	66.3	58.4	16.2	2.2	37.3	6.2	5.0	17.1	1.6	1.3
Colorado	70.2	58.4	9.0	0.5	26.2	6.5	2.0	15.9		0.9
Connecticut	76.6	78.2	7.9	2.1					1.0	
Delaware	73.1	81.9	3.6	1.6	22.6	7.8	<0.1	84.3	1.7	0.3
Dist. of Columbia			3.7	8.6	53.5		4.6	28.3	1.9	0.4
Florida	49.1	71.8	14.1	1.0	21.6	2.4	0.4	51.4	2.9	0.7
Georgia	30.3	72.3	1.6	0.2	31.3	2.2	1.3	51.8	3.5	0.5
Hawaii	50.7	75.0	8.9	0.8	32.3		<0.1	77.1	1.2	0.5
Idaho	79.9	68.9	3.3	0.5	22.7	13.9			2.9	1.9
Illinois	76.1	72.9	7.2	0.2				64.2	3.9	1.0
Indiana	76.8	72.8	3.7	10.9	47.2	32.7			1.5	1.9
Iowa	76.8	76.3	5.1	0.7	25.0	8.8	0.3	9.0	0.9	0.6
Kansas	70.4	78.7	6.6	2.5	24.4	10.2		30.9		
Kentucky	59.1	76.6	6.2	1.7	25.0		<0.1		1.5	1.9
Louisiana	44.7	73.4	2.6	0.7	29.1	6.9	0.1	58.4	0.6	1.1
Maine	72.1	77.6	2.8	0.8	28.7					1.8
Maryland	57.0	71.4	9.3	1.0	17.4	8.6	1.9	33.5	0.5	1.1
Massachusetts	76.1	78.3	9.1	1.0	26.1	8.1		72.0	1.1	0.7
Michigan	72.5	83.4	2.5	0.7	27.3	9.6	<0.1	52.0	1.1	0.7
Minnesota	76.9	80.0		3.2	27.8	6.7			0.8	0.3
Mississippi	25.3	75.8			48.0		1.5	39.6		
Missouri	71.9	69.4	4.3	1.7	19.1	4.8	0.1	74.5		2.2
Montana	70.8	67.3	4.1	0.9	32.5	6.7	0.8	2.7	1.7	1.2
Nebraska	71.1	69.6	4.0	1.1	18.8	7.8		22.0	1.4	1.3
Nevada	58.9	65.7	8.8	6.3	37.4	13.1	0.3	57.9	0.6	0.2
New Hampshire	79.1	81.5	4.7	1.8	18.0	4.4			1.7	1.2
New Jersey	71.1	72.0	43.4		31.6	2.9	1.8	25.2	1.0	1.8
New Mexico	62.2	57.6	14.9	0.8	25.5	2.3	0.6		2.8	0.4
New York	66.7	76.5	8.4	5.4	35.0	7.7	2.2	40.0	2.0	1.1
North Carolina	52.9	64.5	14.5	11.9	33.0	8.1	0.6	50.9	3.5	0.7
North Dakota	78.2	82.9	6.4	0.5	23.4	2.2			1.4	1.6
Ohio	71.1	64.1	5.1	1.6	18.3	5.1	3.1	19.3	1.9	1.3
Oklahoma	63.3	73.3	17.0	2.7	27.7	6.6	0.2	83.4		
Oregon	72.2	64.2					0.2	6.2	1.6	0.9
Pennsylvania	70.5	72.7	11.3	0.7	20.6	0.7	0.2	44.2		1.5
Rhode Island	75.2	74.5							0.7	0.8
South Carolina	30.3	69.8	2.6	0.3	26.3	3.1		57.0	3.5	1.1
South Dakota	78.0	81.7	2.5		13.8		<0.1		1.8	2.5
Tennessee	49.9	72.1		2.3	17.4	5.4		63.1	1.1	0.7
Texas	41.4	71.5	8.7	4.6	30.7	7.2	0.3	77.0		
Utah	78.4	70.5	25.0	2.0	31.2	4.1	3.7	16.2	1.7	1.9
Vermont	72.7	84.5	3.1	1.3	15.5	5.7	<0.1		1.0	0.7
Virginia	33.0	74.3	7.3	1.3	29.9	7.8	0.1	72.0	1.8	0.8
Washington	72.3	52.7			28.2		1.3	21.4	1.1	1.1
West Virginia	77.9	70.1	16.4		20.0		0.6	51.9	1.9	3.2
Wisconsin	73.4	73.5			31.0	4.3				0.4
Wyoming	73.7	76.7	2.8	0.4	23.4				1.5	0.5

Table 5

Summary of Online Data Sources Referenced in This Report

Census Bureau	
Current Population Survey, Voting and Registration Supplement, past reports	http://www.census.gov/population/www/socdemo/voting/past-voting.html#cps
Voting Age Population Reports	http://www.census.gov/hhes/www/socdemo/voting/index.html.
DataFerrett (Census Bureau data download site)	http://dataferrett.census.gov/
Election Assistance Commission	
Election Administration and Voting Survey	http://www.eac.gov/research/election_administration_and_voting_survey.aspx
Federal Voting Assistance Program	
Post-election surveys	http://www.fvap.gov/reference/pesurveyrpts.html
Surveys	
Survey of the Performance of American Elections	http://dspace.mit.edu/handle/1721.1/49847
Cooperative Congressional Election Study	http://projects.iq.harvard.edu/cces/data
Pew Research Center for the People & the Press	http://people-press.org/category/datasets/
National Annenberg Election Survey	http://www.annenbergpublicpolicycenter.org/ProjectDetails.aspx?myId=1
Other Data	
United States Elections Project	http://elections.gmu.edu/voter_turnout.htm
Election Data Services	http://www.electiondataservices.com/
Catalist	http://catalist.us/
Voter Vault	http://www.filpac.com/votervault.htm
Verified Voter, Verifier	http://verifiedvoting.org/index.php
David Leip's Atlas of U.S. Presidential Elections	http://uselectionatlas.org/
State Election Division Web Sites	
Alabama	http://www.sos.state.al.us/election/index.aspx
Alaska	http://www.elections.state.ak.us/
Arizona	http://www.azsos.gov/election/
Arkansas	http://www.sos.arkansas.gov/elections/Pages/default.aspx
California	http://www.ss.ca.gov/elections/elections.htm
Colorado	http://www.sos.state.co.us/pubs/elections/main.htm
Connecticut	http://www.sots.ct.gov/ElectionsServices/ElectionIndex.html
Delaware	http://www.state.de.us/election/default.shtml
District of Columbia	http://www.dcboee.org/index.shtm
Florida	http://election.dos.state.fl.us/
Georgia	http://www.sos.state.ga.us/elections/
Hawaii	http://www.hawaii.gov/elections/
Idaho	http://www.idsos.state.id.us/elect/eleindex.htm
Illinois	http://www.elections.state.il.us/

Table 5

Summary of Online Data Sources Referenced in This Report

State Election Division Web Sites	
Indiana	http://www.in.gov/sos/elections/index.html
Iowa	http://www.sos.state.ia.us/elections/
Kansas	http://www.kssos.org/elections/elections.html
Kentucky	http://sos.ky.gov/elections/
Louisiana	http://www.sec.state.la.us/elections/elections-index.htm
Maine	http://www.maine.gov/portal/government/edemocracy/elections_voting
Maryland	http://www.elections.state.md.us/
Massachusetts	http://www.sec.state.ma.us/ele/eleidx.htm
Michigan	http://www.michigan.gov/sos/1,1607,7-127-1633---,00.html
Minnesota	http://www.sos.state.mn.us/index.aspx?page=4
Mississippi	http://www.sos.ms.gov/elections.aspx
Missouri	http://www.sos.mo.gov/elections/
Montana	http://sos.mt.gov/Elections/index.asp
Nebraska	http://www.sos.ne.gov/dyindex.html
Nevada	http://nvsos.gov/index.aspx?page=3
New Hampshire	http://www.sos.nh.gov/electionsnew.html
New Jersey	http://www.nj.gov/state/elections/
New Mexico	http://www.sos.state.nm.us/sos-elections.html
New York	http://www.elections.state.ny.us/
North Carolina	http://www.sboe.state.nc.us/
North Dakota	http://www.nd.gov/sos/electvote/
Ohio	http://www.sos.state.oh.us/
Oklahoma	http://www.ok.gov/elections/
Oregon	http://www.sos.state.or.us/elections/
Pennsylvania	http://www.dos.state.pa.us/bcel/site/default.asp
Rhode Island	http://www.elections.ri.gov/
South Carolina	http://www.scvotes.org/
South Dakota	http://www.sdsos.gov/electionsvoteregistration/electionsvoteregistration_overview.shtm
Tennessee	http://www.state.tn.us/sos/election/index.htm
Texas	http://www.sos.state.tx.us/elections/index.shtml
Utah	http://elections.utah.gov/
Vermont	http://vermont-elections.org/soshome.htm
Virginia	http://www.sbe.virginia.gov/cms/
Washington	http://www.sos.wa.gov/elections/Default.aspx
West Virginia	http://www.wvsos.com/elections/main.htm
Wisconsin	http://gab.wi.gov/
Wyoming	http://soswy.state.wy.us/Elections/Elections.aspx

References

Alvarez, Lizette. "Republican Legislators Move to Tighten Rules on Voting." *New York Times*, May 29, 2011.

Alvarez, R. Michael, Thad E. Hall, and Morgan H. Llewellyn. "Are Americans Confident Their Ballots Are Counted?" *The Journal of Politics* 70, no. 03 (2008): 754-766.

Ansolabehere, Stephen, and Eitan Hersh. *The Quality of Voter Registration Records: A State-by-State Analysis*. Caltech/MIT Voting Technology Project, 2010.

Ansolabehere, Stephen, and Charles Stewart III. "Residual Votes Attributable to Technology." *Journal of Politics* 67, no. 2 (2005): 365-389.

Bauman, Kurt, and Tiffany Julian. "A Summary of Data Collection Procedures and Reports of Voter Turnout from the Current Population Survey." In *Workshop on Overreporting of Voter Turnout*. McGill University, Montreal, 2010.

Brace, Kimball W., and Michael P. McDonald. *Final Report of the 2004 Election Day Survey*. Washington, D.C.: Election Assistance Commission, 2005.

Burden, Barry C. "Voter Turnout and the National Election Studies." *Political Analysis* 8, no. 4 (2000): 389-398.

Caltech/MIT Voting Technology Project. *Voting: What Is/What Could Be*. Pasadena, Calif. and Cambridge., Mass.: Caltech and MIT, 2001.

Cemenska, Nathan, Jan. E. Leighley, Jonathan Nagler, and Daniel P. Tokaji. *Report on the 1972-2008 Early and Absentee Voting Dataset*. Washington, D.C.: Pew Center on the States, 2009.

Clausen, Aage. "Response Validity: Vote Report." *Public Opinion Quarterly* 41 (1968): 56-64.

Ferber, Robert. "Item Nonresponse in a Consumer Survey." *Public Opinion Quarterly* 30, no. 3 (1966): 399-415.

Governor's Select Task Force on Election Procedures, Standards, and Technology. *Revitalizing Democracy in Florida*. Miami: Collins Center for Public Policy, 2001.

Gronke, Paul, Charles Stewart III, and James Hicks. *Residual Voting in Florida*. Washington, D.C.: Pew Center on the States, 2010.

Highton, Benjamin. "Self-Reported Versus Proxy-Reported Voter Turnout in the Current Population Survey." *Public Opinion Quarterly* 69, no. 1 (2005): 113-123.

McDonald, Michael P. "On the Overreport Bias of the National Election Study Turnout Rate." *Political Analysis* 11, no. 2 (2003): 180-186.

Pew Center on the States. *Being Online Is Not Enough: State Elections Web Sites*. Washington, D.C.: Pew Center on the States, 2008.

Pew Center on the States. *Being Online Is Still Not Enough: Reviews and Recommendations for State Election Websites 2010*. Washington, D.C.: Pew Center on the States, 2011.

Pew Center on the States. *Data for Democracy: Improving Elections through Metrics and Measurement*. Washington, D.C.: Pew Center on the States, 2008.

Pew Center on the States. *Moving toward a Better Election System for Military and Overseas Voters*. Washington, D.C.: Pew Center on the States, 2010.

Silver, Brian D., Barbara A. Anderson, and Paul R. Abramson. "Who Overreports Voting?" *The American Political Science Review* 80, no. 2 (1986): 613-624.

Stewart, Charles, III. "Adding up the Costs and Benefits of Voting by Mail." *Election Law Journal* 10, no. 3 (September 2011).

Stewart, Charles, III. "Losing Votes by Mail." *Journal of Legislation and Public Policy* 13, no. 3 (2010): 573-602.

Stewart, Charles, III. "Residual Vote in the 2004 Election." *Election Law Journal* 5, no. 2 (2006): 158-169.

Traugott, Michael W., and John P. Katosh. "Response Validity in Surveys of Voting Behavior." *The Public Opinion Quarterly* 43, no. 3 (1979): 359-377.

U.S. Census Bureau. *Voting and Registration in the Election of November 2008*. P20-562.

U.S. Department of Justice, "Voting Section Litigation," http://www.justice.gov/crt/about/vot/litigation/caselist.php (accessed May 26, 2011).

U.S. Election Assistance Commission. *The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office 2007-2008*.

"Uniformed and Overseas Citizens Absentee Voting Act," P.L. 99-410, 42 U.S.C.1973ff, 1986.

Endnotes

1. Pew Center on the States, *Data for Democracy: Improving Elections through Metrics and Measurement* (Washington, D.C.: Pew Center on the States, 2008).

2. For a general discussion of the use of under- and over-votes (i.e., residual votes) as a diagnostic tool, see Paul Gronke, Charles Stewart III, and James Hicks, *Residual Voting in Florida* (Washington, D.C.: Pew Center on the States, 2010).

3. Information about North Carolina's election returns can be found at http://www.sboe.state.nc.us/content.aspx?id=69.

4. Kurt Bauman and Tiffany Julian, "A Summary of Data Collection Procedures and Reports of Voter Turnout from the Current Population Survey," Social, Economic and Housing Statistics Working Paper 2010-11 (Washington, D.C.: U.S. Census Bureau, Housing and Household Economic Statistics Division, November 1, 2010), http://www.census.gov/hhes/www/socdemo/voting/publications/other/CPS_Turnout_11-2010.pdf.

The interviews are conducted whenever the calendar week falls on the19th, and follows a "4-8-4" sampling method. The survey analyzes each household for four months, and following an eight month hiatus, revisits the respondents in the survey for an additional four months.

In prior years, the VRS was known as the "Voter Supplement." Although the VRS has been conducted since 1964, the Census Bureau has only retained micro-data beginning with the 1972 study. Therefore, prior to 1972, the only data available are tabulations produced using the data. These tabulations are generally marginal frequencies, that is, aggregated counts, often broken down at the state level. Therefore, these earlier reports do not allow as thorough an exploration of voting-related issues as is possible in more recent years.

5. The Census Bureau's CPS can be accessed at http://www.censu.gov/cps.

6. Although question wording and response categories have changed somewhat, the current battery of questions has been relatively stable since 1996. Previously, the voter supplement generally recorded only whether the respondent voted and, for non-voters, whether the respondent was registered. Occasionally, other questions would be added, such as the time of day when the respondent voted.

7. The most widely cited academic study to rely heavily on the VRS to study voting participation patterns is Raymond E. Wolfinger and Steven J. Rosenstone, *Who Votes?* New Haven, Yale University Press, 1980.

8. For the sake of comparability across time, Figure 1 is based on the *Current Population Report* publications issued by the Census Bureau, rather than the micro-data, when available. The Census Bureau maintains an online archive of the voting and registration series of the Population Characteristic (P20) reports at the following URL: http://www.census.gov/hhes/www/socdemo/voting/publications/p20/index.html. Note that racial categories used by the Census have changed over time. For 1964 and 1968, the comparison is between whites and non-whites. (Also, for 1964, the participation rate of whites had to be calculated from the data provided in the P20 report.) For 1972–2000, the comparison was between (non-Hispanic) whites and blacks. For 2004 and 2008, the comparison is between whites and blacks who only reported one racial category.

9. See Charles Stewart III, "Adding up the Costs and Benefits of Voting by Mail," *Election Law Journal* 10, no. 3 (September 2011).

10. See Stewart and Westgaard, "Data Dispatches: Exploring the Census' Voting & Registration Supplement" May 5, 2011.

11. One measure of the dearth of official statistics about the challenges facing the disabled in voting is the fact that the CPS only recently began asking about disability status for all respondents in 2009. Therefore, starting with the 2010 VRS, researchers will be able to track more precisely the experience of people with disabilities in voting.

12. The most common response was "too busy, conflicting work or school schedule," given by 17.5 percent of non-voters. See U.S. Census Bureau, *Voting and Registration in the Election of November 2008*. P20-562.

13. Kurt Bauman and Tiffany Julian, "A Summary of Data Collection Procedures and Reports of Voter Turnout from the Current Population Survey," in *Workshop on Overreporting of Voter Turnout* (McGill University, Montreal: 2010).

14. Ibid.

15. See Barry C. Burden, "Voter Turnout and the National Election Studies," *Political Analysis* 8, no. 4 (2000); Michael P. McDonald, "On the Overreport Bias of the National Election Study Turnout Rate," *Political Analysis* 11, no. 2 (2003).

16. Ibid.

17. Benjamin Highton, "Self-Reported Versus Proxy-Reported Voter Turnout in the Current Population Survey," *Public Opinion Quarterly* 69, no. 1 (2005).

18. The American National Election Study (ANES), currently a collaboration between the University of Michigan and Stanford University, funded by the National Science Foundation, is the longest-running national academic survey of public opinion that focuses on politics and elections. The core of the ANES is an in-person time-series study, which asks respondents a set of questions, some of which have been unchanged since 1948. These questions include items such as party identification, ideology, vote choice for federal offices, and attitudes toward the political parties. The sample size of the time-series study has ranged from 662 in 1948 to 2,705 in 1972. Detailed information about the ANES is available through its Web site: http://electionstudies.org/index.htm.

19. See Aage Clausen, "Response Validity: Vote Report," *Public Opinion Quarterly* 41, no. (1968); Brian D. Silver, Barbara A. Anderson, and Paul R. Abramson, "Who Overreports Voting?" *The American Political Science Review* 80, no. 2 (1986); Michael W. Traugott and John P. Katosh, "Response Validity in Surveys of Voting Behavior," *The Public Opinion Quarterly* 43, no. 3 (1979).

20. HAVA Section 241.

21. 42 USC 1973gg-7.

22. Datasets and reports related to the EAVS may be found at the following EAC Web site: http://www.eac.gov/research/election_administration_and_voting_survey.aspx.

23. States vary in handling provisional ballots cast outside a voter's assigned precinct. Although many states discard them, a few states count the votes from these ballots for statewide offices that are on all ballots in the state, or county offices that are on all ballots in the county, regardless of precinct.

24. Oregon does allow voters to return ballots in-person, but only a small fraction of voters do so.

25. Alaska, which has no counties, reported its data at the state level. New York, which does have counties, likewise reported statistics only aggregated at the state level.

26.This non-compliance has led to several legal actions initiated by the U.S. Justice Department. U.S. Department of Justice, "Voting Section Litigation," http://www.justice.gov/crt/about/vot/litigation/caselist.php (accessed May 26, 2011).

27. To allow for the fact that county populations vary dramatically in size, these averages are weighted by the number of registered voters in each county. In North

Dakota and counties that did not report registration statistics, we substituted a proxy measure, usually turnout in the general election.

28. In the 2010 NVRA data that were released in the summer of 2011, registration workflow data were reported at a much higher level. Preliminary analysis reveals that virtually all jurisdictions reported the number of registered voters, 97 percent reported how many registration forms they had processed, and 88 percent reported how many of these registration forms were valid.

29. These counties do not include those in North Dakota, which does not have voter registration.

30. In 2008, Georgia, New Jersey, and New Mexico did not submit information for the EAVS Statutory Overview. Although Maine and Tennessee did not submit information in time for publication in EAVS Statutory Overview, they nevertheless submitted information after the publication deadline. Therefore, those interested in adding these states can do so by coding the data for themselves. In 2010, all the states responded to the statutory overview survey, with data missing only from Guam.

31. These terms are over vote, under vote, blank ballot, void ballot, spoiled ballot, provisional ballot, challenged ballot, absentee voting, and early voting.

32. The dataset may be accessed through the following URL: http://www.eac.gov/research/election_administration_and_voting_survey.aspx.

33. The SPAE was conducted by researchers associated with the Caltech/MIT Voting Technology Project, supported by the Pew Center on the States under the Make Voting Work Initiative, along with the JEHT Foundation and the AARP.

34. Data and the final report can be downloaded at the following site: http://dspace.mit.edu/handle/1721.1/49847.

35. In addition to the Internet survey that was conducted nationwide, the SPAE conducted a parallel telephone survey in 10 states to allow comparison between this newer (and less expensive) survey research mode and the more established telephone mode based on random digit dialing.

The questions on the SPAE were piloted in two surveys that preceded the 2008 presidential election: in the 2007 gubernatorial elections in Kentucky, Louisiana, and Mississippi, and in the February 2008 "Super Tuesday" primaries held in 15 states. In addition, the same instrument was used to study the 2009 gubernatorial elections in New Jersey and Virginia.

36. The SPAE was designed to have a voter validation analysis performed. Because of delays with the vendor performing the validation, that analysis has yet to be done.

37. The CCES, originally sponsored by MIT, is currently housed at Harvard University. The principal investigator is Professor Stephen Ansolabehere of the Harvard Government Department. Funding for the CCES comes from a variety of sources, including the host universities, the National Science Foundation, The Pew Charitable Trusts and the universities that buy specialized modules. More information may be found at the CCES's Web site: http://projects.iq.harvard.edu/cces/.

38. CCES data, including the AEI/Brookings module, can be downloaded at the following URL: http://projects.iq.harvard.edu/cces/data.

39. Information about the National Annenberg Election Survey, including data available for download, may be found at the following URL: http://www.annenbergpublicpolicycenter.org/ProjectDetails.aspx?myId=1.

40. Raw datasets from the Pew Research Center for the People & the Press may be downloaded at the following URL: http://people-press.org/category/datasets/.

41. Information about Freedom in the World reports can be found at http://www.freedomhouse.org/template.cfm?page=15.

42. Country Experts answer questions on a seven-point scale. An example of a checklist question is "Is the head of government or other chief national authority elected through free and fair elections?" Examples of sub-questions below this include, "Did established and reputable national and/or international election monitoring or-

ganizations judge the most recent elections for head of government to be free and fair?" and "Have there been undue, politically motivated delays in holding the most recent election for head of government?"

43. Pew Center on the States, *Being Online Is Still Not Enough: Reviews and Recommendations for State Election Websites 2010* (Washington, D.C.: Pew Center on the States, 2011).

44. The data and supporting documentation for the 2008 surveys can be found at the following URL: http://www.fvap.gov/reference/18threport.html. Several decades of reports can be downloaded from the following site: http://www.fvap.gov/reference/pesurveyrpts.html.

45. These populations are local election officials, voting assistance officers (state and military), active-duty military personnel, and all overseas citizens (federal and non-federal employees).

46. The URL of Election Data Services is http://www.electiondataservices.com.

47. The URL for Catalist is http://catalist.us. An example of a study that uses data such as these to analyze the quality of voter registration lists is Stephen Ansolabehere and Eitan Hersh's "The Quality of Voter Registration Records: A State-by-State Analysis." Caltech/MIT Voting Technology Project Working Paper, 2010.

48. Information about VerifiedVoting.org can be found at http://verifiedvoting.org/article.php?id=5617.

49. The URL for The Verifier is http://verifiedvoting.org/index.php.

50. The exception is North Dakota, which does not have voter registration.

51. Some states did tighten registration requirements in 2011 which flowed against this trend. See "Voter Registration and Requirements," http://topics.nytimes.com/top/reference/timestopics/subjects/v/voter_registration_and_requirements/index.html, last accessed July 14, 2011; Lizette Alvarez, "Republican Legislators Move to Tighten Rules on Voting," *New York Times*, May 29, 2011.

52. *Upgrading Democracy*, Pew Center on the States, 2010, 2.

53. Stephen Ansolabehere and Eitan Hersh, *The Quality of Voter Registration Records: A State-by-State Analysis* (Caltech/MIT Voting Technology Project, 2010).

54. U.S. Election Assistance Commission, *The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office 2007-2008*.

55. *National Voter Registration Act. Sec. 1973gg-6* http://www.justice.gov/crt/about/vot/42usc/subch_ih.php#anchor_1973gg-6.

56. It is possible to adjust the nationwide VAP estimate using estimates of the eligible overseas population. It is not possible, however, to make these adjustments on a state-by-state basis.

Professor Michael McDonald at George Mason University regularly updates statistics on voting-eligible populations. See http://elections.gmu.edu/voter_turnout.htm.

57. To make the VRS rate comparable to the rate that uses VEP as the denominator, we discard answers from respondents to the VRS who stated said they were not registered because they were ineligible, which removes about 8 percent of self-reported non-registrants.

58. The standard deviation of the VEP-produced registration rates is 11.3, compared to 4.3 for the VRS-produced rates.

59. The correlation coefficient associated with the two rates is .57. It is clear that this correlation is depressed by the presence of two outliers, Mississippi and New Mexico. If they are removed from the analysis, the correlation jumps to .72.

60. To make this discussion manageable, we confine ourselves to general elections in even-numbered years, which can also be called federal elections, because there is always at least one federal office, U.S. House of Representatives, on every ballot.

61. State election division Web sites and personal communications from state election officials.

62. The correlation coefficient between the two series is .80, and .86 when weighted by voting eligible population.

63. The CSES is an international collaborative project that now involves researchers from approximately 50 nations. One part of this project is a common core of public opinion questions that are administered to voters in all the nations being studied, following each nation's national election. The CSES is managed collaboratively by the Center for Political Studies at the University of Michigan and GESIS – Leibniz Institute for the Social Sciences, with support from the American National Science Foundation, German Federal Ministry of Education and Research, University of Michigan, and governments of several German Länder (states). For more information about the CSES, see its Web site: http://www.cses.org/.

64. The results reported here are from Sarah Birch, "Perceptions of Electoral Fairness and Voter Turnout," *Comparative Political Studies,* vol. 43, no. 12 (2010), pp. 1601–22.

65. Pew Research Center for the People and the Press, "November 2008 Re-Interview Survey, Final Topline," (November 6-9, 2008), http://people-press.org/files/legacy-questionnaires/471.pdf; Pew Research Center for the People and the Press, "High Marks for the Campaign, a High Bar for Obama: Republicans Want More Conservative Direction for GOP," (November 13, 2008), http://www.people-press.org/2008/11/13/high-marks-for-the-campaign-a-high-bar-for-obama/.

66. R. Michael Alvarez, Thad E. Hall, and Morgan H. Llewellyn, "Are Americans Confident Their Ballots Are Counted?," *The Journal of Politics* 70, no. 03 (2008).

67. Part of the explanation also rests with the rise in mandated vote-by-mail. See Charles Stewart, III, "Losing Votes by Mail," *Journal of Legislation and Public Policy* 13, no. 3 (2010).

68. Nathan Cemenska et al., *Report on the 1972-2008 Early and Absentee Voting Dataset* (Washington, D.C.: Pew Center on the States, 2009).

69. U.S. Census Bureau, Current Population Survey, Voting and Registration Supplement.

70. As mentioned in Section 1, in dealing with information from the EAVS, one must carefully sift through the raw data so that anomalies can be spotted and addressed. In the case of the 2008 EAVS, 86 jurisdictions reported more ballots returned for counting than were transmitted. Of these, 32 were from Oregon and 37 from Connecticut. These observations have been omitted from the calculations that follow. On the other hand, more than 90 percent of absentee ballots were reported unreturned by Wisconsin, 43 percent by New Jersey, and 25 percent by Utah. The Wisconsin figures are clearly in error, so these states have been excluded from the analysis that follows. New Jersey and Utah remain in this analysis, but their reports deserve further scrutiny. Finally, Tennessee reported that all absentee ballots transmitted by counties in the state were returned, which is also likely in error. Therefore, Tennessee has been removed from the analysis, pending further investigation.

Anomalies in the statistics pertaining to rejected absentee ballots are dealt with as follows: Seventy-six counties report rejection rates greater than or equal to 100 percent of returned absentee ballots. Sixty-six of these are from Wisconsin. We have removed these jurisdictions from the analysis.

71. The U.S. Postal Service apparently does not release estimates of the number of letters that are never delivered. However, in its 2011 second-quarter statistical report, the USPS did report that the average days-to-delivery of a pre-sorted piece of first-class mail was 2.4, with 99.9 of mail delivered within 10 days. Even in the mail classes with the slowest delivery times, parcel post and media mail, 96 percent and 97 percent of packages, respectively, were delivered within 10 days. See http://www.prc.gov/Docs/75/75035/fy2011-q2.pdf, Table 4.

72. The data missing from Oregon and Washington are themselves an anomaly because of the universal vote-by-mail systems in those states. Oregon does have a separate absentee-ballot procedure, mostly for out-of-state residents. On the whole, though, the EAVS survey does not account for either states' election systems very well, which makes missing data from these states different from those from the other states.

73. Furthermore, an examination of the EAVS dataset itself reveals that many of the responses that are categorized as "other" could easily have been included in the standard categories. For instance, Los Angeles County reported 16,443 ballots as "undeliverable," which is a response category related to the statistics concerning ballots mailed and not returned.

74. Pew Center on the States, *Moving Toward a Better Election System for Military and Overseas Voters* (Washington, D.C.: Pew Center on the States, 2010).

75. Public Law 111-84. Also see the "NASS Summary of the Military and Overseas Voter Empowerment Act (MOVE Act)" at http://nass.org/index.php?option=com_docman&task=doc_download&gid=816.

76. Testimony of Bob Carey, NIST TGDC Plenary Meeting, January 13, 2011.

77. "2008 Election Administration and Voting Survey: A Summary of Key Findings," U.S. Election Assistance Commission, November 2009, p.11, http://www.eac.gov/assets/1/Documents/2008%20Election%20Administration%20and%20Voting%20Survey%20EAVS%20Report.pdf.

78. Four states are exempt from this regulation in HAVA and do not issue provisional ballots. Idaho, Minnesota, and New Hampshire are exempt because they allow Election Day registration. North Dakota is exempt because the state does not have voter registration. Other states that allow Election Day registration—Iowa, Maine, Montana, Wisconsin and Wyoming—issue provisional ballots, although generally they do not issue many.

79. Pew Center on the States, *Provisional Ballots: An Imperfect Solution* (Washington, D.C., Pew Center on the States, 2009).

80. The provisional-ballot data from the EAVS in 2008 are fairly complete—the number cast is missing in 31 percent of the jurisdictions; however this represents just 14 percent of the electorate. For rejection rates, the most frequent missing variable is the number of provisional ballots cast, in 28 percent of the cases, which represent about 8 percent of the electorate.

81. Gerken, Heather. "Provisional Ballots: The Miner's Canary for Election Administration," prepared for the Pew Charitable Trusts, July 2009, http://www.pewcenteronthestates.org/report_detail.aspx?id=54807.

82. These could not be calculated because an insufficient number of counties reported how many provisional ballots were cast.

83. "Best Practices on Provisional Voting," *Election Assistance Commission*, complement to Advisory 2005—006, 2006, http://www.eac.gov/assets/1/workflow_staging/Page/56.PDF.

84. In approximately 30 states and the District of Columbia, provisional ballots cast in the wrong precinct will be rejected.

85. See "Provisional Ballots: An Imperfect Solution." The second most common reason for provisional ballot rejection according to the 2008 EAC data are other/miscellaneous.

86. These have been suggested by the EAC best practices as well as by Ohio Secretary of State Husted (R) and groups including the League of Women Voters.

87. Much of the following discussion was taken from Paul Gronke, Charles Stewart III, and James Hicks, *Residual Voting in Florida* (2010).

88. "Chad" is defined as the small pieces of card stock punched out of a punch card ballot. Many of the controversies surrounding the 2000 recount in Palm Beach County, Fla., derived from the fact that the punches did not always break free of the ballot card, leading to ambiguities in interpreting voter intent. "Pregnant" chad referred to cases where chad was not punched clear of the ballot card, but was bowed outward, the result of the stylus meeting resistance behind the card. "Hanging" chad referred to cases where chad was still attached to the card. On the physical properties of punch cards that lead to these problems, see, Douglas W. Jones, "Chad—From Waste Product to Headline," http://www.cs.uiowa.edu/~jones/cards/chad.html, accessed September 26, 2010.

89. A "butterfly ballot" refers to a ballot design that is uniquely used with Votomatic punch cards. Such a ballot places the names for an office on facing pages, with the associated punch locations in the middle. This design confuses some voters because the sequence of the names on the ballot does not correspond with the sequence of the punch-positions on the ballot card. On the effects of the butterfly ballot in Florida see Jonathan N. Wand et al, "The Butterfly Did It: The Aberrant Vote for Buchanan in Palm Beach County, Florida," *American Political Science Review,* 2001, vol. 95(4):793-810.

90. Standards Governor's Select Task Force on Election Procedures, and Technology, *Revitalizing Democracy in Florida* (Miami: Collins Center for Public Policy, 2001). pp. 31-32.

91. Stephen Ansolabehere and Charles Stewart III, "Residual Votes Attributable to Technology," *Journal of Politics* 67, no. 2 (2005); Caltech/MIT Voting Technology Project, *Voting: What Is/What Could Be* (Pasadena, Calif. and Cambridge., Mass.: Caltech and MIT, 2001).

92. Gronke, Stewart III, and Hicks, *Residual Voting in Florida*.

93. Charles Stewart, III, "Residual Vote in the 2004 Election," *Election Law Journal* 5, no. 2 (2006).

94. P.L. 107-252, §241.

95. See the 2010 Election Administration and Voting Survey Change Log which cites minor revisions to the survey at http://www.eac.gov/assets/1/AssetManager/2010%20EAVS%20Change%20Log.pdf.

96. "Item nonresponse" occurs when a questionnaire is returned but some items have not been answered. It is distinguished from "unit nonresponse," which is when a person does not respond to the questionnaire at all. Item nonresponse has been a longstanding topic of concern and research within the public opinion field. For the classic discussion of the issue, see Robert Ferber, "Item Nonresponse in a Consumer Survey," *Public Opinion Quarterly* 30, no. 3 (1966).

97. We do not examine the thoroughness of the 2004 EAVS because difficulties in using the data are so great that it seems unlikely that researchers will use that dataset. For a discussion of some limitations of the 2004 study, see Kimball W. Brace and Michael P. McDonald, *Final Report of the 2004 Election Day Survey* (Washington, D.C.: Election Assistance Commission, 2005).

98. "The Uniformed and Overseas Citizens Absentee Voting Act," in *U.S. Code* (U.S.: 1986)., sec. 1973ff-1(c).

99. This does not include North Dakota, which does not have voter registration.

100. Information about the DataFerrett tool can be found at http://dataferrett.census.gov.

101. Pew Center on the States, *Being Online Is Not Enough: State Elections Web Sites* (Washington, D.C.: Pew Center on the States, 2008). Pew Center on the States, *Being Online Is Still Not Enough: Reviews and Recommendations for State Election Websites 2010* (Washington, D.C.: Pew Center on the States, 2011).

102. "Census Bureau Releases State Estimates of Voting-Age Population," (Washington, D.C.: U.S. Census Bureau, January 31, 2008), http://www.census.gov/newsroom/releases/archives/population/cb08-21.html.

103. Michael P. McDonald and Samuel L. Popkin, "The Myth of the Vanishing Voter," *American Political Science Review* vol. 95, no. 4 (2001), pp. 963–74.

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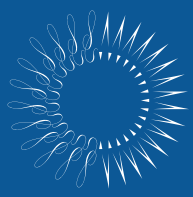

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