

# **Laboratories of Democracy?**

## **State Electoral Processes**

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The states are often seen as “laboratories of democracy” (Rom, 2007). Exactly what this phrase means is open to debate, but it suggests several things. First, if the states have authority over a policy domain they will innovate (if not actually ‘experiment’, as would occur in a true laboratory). Second, the states will learn from their innovations. Third, successful innovations will become more broadly adopted (either by other states or the federal government), while unsuccessful innovations will wither away.

## **LABORATORIES**

There is at least partial support for these claims. That the states innovate is abundantly clear.<sup>1</sup> That the states emulate other states is also solidly established (Walker, 1969; Gray, 1973; Mooney and Lee, 2001; Berry and Berry, 1990; among many others).

Laboratories of democracy can also work up through the federal system as well as across the states. In addition to policy diffusion throughout the states, the federal government can also rely on the states for policy innovations (Hedge, 1998; Morehouse and Jewell, 2004; Weissert, 2000). In this model political actors at the federal level choose which policies they believe would make good federal law, based on their effectiveness and popularity in the states. Policies originally implemented at the state level are then blended with federal objectives.

What is much less clear is whether the states actually learn much from their innovations, and whether ‘successful’ innovations multiply while ‘unsuccessful’ ones diminish. More precisely, it is unclear whether states learn much about the *policy* effectiveness of their innovations and whether *effective* policies are emulated. Instead, it seems likely that the states learn a great deal about the *political* effectiveness (i.e., the political popularity) of their policies, and that politically *effective* policies become more widely adopted.<sup>2</sup> To

our knowledge, only two studies (Volden, 2006; Anonymous, 2008) have examined whether effective policies have been emulated by other states; both find modest support for this proposition.

## **DEMOCRACY**

The question ‘what is a good democracy?’ has perplexed thinkers since democratic ideals were first proposed. This paper does not fully address this classic question, but it does focus more narrowly on several key issues of democratic elections. It recognizes, first, that some topics regarding elections – such as who should be eligible to vote? -- are politically fraught, and subject to legitimate disagreement. These topics may still provide some insight on the proposition that states are laboratories of democracy.

Electoral processes are an ideal policy domain on which to assess the ‘laboratories of democracy’ proposition:

Election procedures should, in principle, have a single goal: to record accurately the electoral preferences of registered voters. At the voting place, properly registered voters should be able to vote and non-registered voters should be barred from voting. Ballots should be designed so that voters can identify their candidates of choice and mark their ballots correctly. Ballots should be counted precisely and, if the results are challenged, recounted exactly.

Election processes should be a good test of the laboratories within a [mainly] confederal [i.e., decentralized] system for several reasons. First, recording citizens preferences accurately is a fundamentally important to democratic politics. Second, literally everyone publicly agrees that these

preferences *should* be recorded truthfully. Third, election processes are almost entirely decentralized, with state and local governments having virtually entire control over their design and operation. Fourth, the states have had more than 200 years to perfect their elections processes, and these processes are tested on a regular basis. Fifth, improving election processes does not require large and complex behavioral changes (as do many other policy domains); improvements are mainly technological and administrative (Rom, 2007: 268-69).

Finally, the federal government enacted the Help American Vote Act (HAVA) of 2002. HAVA was written “To establish a program to provide funds to States to replace punch card voting systems, to establish the Election Assistance Commission to assist in the administration of Federal elections and to otherwise provide assistance with the administration of certain Federal election laws and programs, to establish minimum election administration standards for States and units of local government with responsibility for the administration of Federal elections, and for other purposes” (U.S. Congress, 2002). This helped turn an almost purely confederal system (except for the electoral provisions embedded into the Constitution) into a one more federal in nature.

Two other aspects of the ‘laboratories of democracy’ hypothesis have persistently been ignored. What is the link, if any, between democracy and experimentation? That is, are the states that are more democratic more or less likely to innovate and to learn from their innovations? Also, do the state laboratories produce better democracies? The second question serves as the motivation for this paper.

## **WILL THE STATES BE EFFECTIVE LABORATORIES OF DEMOCRACY?**

The effectiveness of the laboratories depends on various contextual factors, such as the capacity, competence and incentives of state governments to innovate. Two factors seem especially relevant concerning state electoral processes: policy complexity and institutional structure.<sup>3</sup>

### ***Policy Complexity***

Whether states can innovate effectively depends, in part, on the analytical difficulty of the policy problem (Kollman, Miller and Page, 2000). Assume that a fixed set of resources is available to solve the problem. These resources can be pooled or separated. For problems that are only moderately difficult, it appears that dividing the resources into separate pools, which allows for multiple and diverse problem-solving efforts, can lead to optimal solutions. For the most difficult problems, however, divided resource pools may lack the “critical mass” of expertise necessary for problem solving (the unitary approach). For the simplest problems, neither pooling nor dividing resources is likely to produce more effective policies, because either approach is likely to work.

A key unknown here is how to assess the difficulty of the policy problem. Kollman and colleagues suggest that difficult problems include “curing diseases, constructing welfare policies, or designing computer chips” (Kollman, Miller and Page, 2000: 103). It is not obvious that centralized systems are better at solving these particular problems than decentralized ones; in fact, many of the successful innovations in these areas have come from smaller units. Although it might be optimal in theory to have unitary governments handle complex problems and decentralized governments address simpler ones, what constitutes complexity in practice is itself difficult to ascertain.

Regarding the state electoral processes we consider in this paper, it seems that they most likely fall within the ‘moderately complex’ category. They do not (exactly) involve rocket science, but neither do they lend themselves to entirely simple or simplistic solutions. Indeed, all the major challenges (distinguishing those who are registered to vote from those who are not; allowing voters to express their preferences accurately, and precisely tallying these preferences) are routinely confronted by business firms.<sup>4</sup> Getting elections ‘right’ can require behavioral change (for example, inducing voters to bring appropriate identification, and training poll workers to verify voting technologies), but hardly the kind of changes involved in, say, remedying drug addiction.

### *Institutional Arrangements*

The second relevant factor concerns the actual institutional arrangements among the states and the national government. We might specify three core arrangements (that actually exist in the United States, depending on the policy domain): a confederal system, in which the states have sole authority; a federal system, in which the states and the national government share responsibility; and a unitary system, in which the national government has sole jurisdiction.

The states (and local governments) have primary responsibility over a wide variety of policy domains in the United States, and they traditionally have maintained authority over their voting processes.<sup>5</sup> There are good reasons to think that when the states do assume authority—that is, when they operate as a confederal system—effective policy innovation will often not occur. Still, there are countervailing factors that suggest that the states can be quite innovative and that these innovations often will spread across the states.

A confederal system may not be well equipped to produce effective policy experiments, even for moderately difficult problems, for a several reasons. First, each state may view itself *sui generis*, with its own unique history, culture, characteristics, and goals. As a result, the states could be unwilling to learn from the others—after all, what unique can we learn from them? Moreover, in a confederal system the states have no particular incentive to innovate, or to share the results of their policy learning with others. This is a classic “public goods” problem: if a state bears all the costs and risks of its experiment, and if other states can easily imitate successful experiments, all states have incentives to let other states experiment. Consequently, little innovation will occur.

Still, there can be benefits—or at least no disadvantages relative to a unitary system—to a confederal system both in terms of policy innovation and diffusion. Even without concern for the other states, each state has its own reasons to innovate to solve policy problems. Although each state has no special reason to share its innovations, the other states (to the extent that they have common goals and see their problems and environments as similar) do have incentives to emulate policies that they see as effective. The states certainly have easy access to information about the policies of other states through such organizations as the National Governors Association (NGA), the National Conference of State Legislatures (NCSL), and the National Association of Secretaries of State (NASS) (see, for example, the various surveys of state electoral practices; NASS, n.d.).

Under certain circumstances, a federal system might be superior to both unitary and confederal systems for effective policy innovation. A first condition is that (enough of ) the states have sufficient capacity relative to problem difficulty to develop effective

innovations. A second condition is that the states have sufficient flexibility to innovate. A third condition is that a clear set of policy goals is established (either by fiat from the national government or by agreement among the states). A final condition is that the states have sufficient motivation (whether through compulsion or inducement) to experiment, learn what works, and adopt effective innovations. Indeed, one way to solve the public goods problem mentioned above is for the national government to reduce the costs and risks of state experimentation through subsidies or other stimulus. The last two conditions are the key ones that distinguish the federal system from the confederal one and provide the opportunity for more effective innovation. If each state is pursuing the same goal and every state has motivation both to innovate and to adopt the most effective innovations, we might expect more innovation, more learning, and greater policy effectiveness. Especially since the passing of HAVA in 2002, and the closely contested (and at times mishandled) presidential election of 2000 that triggered the law's enactment, the states do appear to have greater incentives, and capacities, for electoral reform.

That we know little about the adoption and diffusion of effective policies has several main causes. On the one hand, actually demonstrating whether a policy is effective is difficult under the best of circumstances, given the challenges in designing and conducting high quality, real-world, program evaluations.<sup>6</sup> On the other, politicians and bureaucrats are understandably reluctant to devote much time, energy, and other resources on systematic program evaluations. Moreover, the very definition of effectiveness (or success) is politically contested. One simple example might illustrate: Is fluoridating public water supplies good policy? In the view of most public health

officials, the answer is unequivocally: Yes (CDC, 2001: 26). In the view of the public, which appears suspicious of medical authorities and the concept of the government adding medicinal chemicals to the water supply, the answer appears unmistakably: No – as more than 70 communities have voted to reject fluoridation of public water supplies since 1999 (Fluoride Action Network, n.d.).

### **EXPECTATIONS FOR LABORATORIES OF DEMOCRACY**

What patterns of policy innovation and emulation might be expected if the states actually behave as laboratories of democracy? The answers are not immediately obvious, but at least four potential patterns might be identified. We assume, first, that every state actually wishes to adopt the most effective policy possible.<sup>7</sup> We assume, next, that there are four possible policy scenarios, based on the effectiveness of various policy options, which we denote as ‘mousetraps’, which have varying levels of effectiveness.

In Scenario I, various different types of mousetraps are effective, and equally so, at trapping mice. In this scenario, once these mousetraps are identified, potentially by the innovations of individual states, we would expect to see a diverse set of state policy choices: states could choose the mousetrap that best matched its preferences for mousetraps. We would observe no policy convergence, although we might still see policy emulation (as states select choose the mousetrap from the state of its choice).

In Scenario II, one mousetrap is demonstrably superior to the others: it fully solves the policy problem, and the others do not. If this is the case, we would expect the states to converge so that every state chose that mousetrap, and policy uniformity would result.

An example of an election reform that follows this path is the use of the secret ballot, first adopted in Massachusetts and eventually adopted by all the states.

In Scenario III, some mousetraps are better than others, but no mousetrap is perfectly effective. If this is true, we would expect at least some states – but not necessarily all of them – to adopt the better mousetrap. Although we would expect some policy convergence, we would not expect complete policy uniformity. Some states might choose not to select the better mousetrap, because they believe that they can develop a better one or that someone else will.

A fourth scenario occurs when the federal government provides incentives to build a better mousetrap. Once a preferred mousetrap is identified through experimentation the federal government increases the incentives given to states to start using the mousetrap. These incentives can either be punitive or financial inducements. But, this process of identifying the best mousetrap does not always guarantee effectiveness as the most important factor guiding decision-making. Mousetrap suppliers, e.g. wood composite producers, may attempt to influence which mousetrap is favored, potentially biasing the choice of the federally preferred mousetrap. The fourth scenario can also be impacted by a focusing event, from which large-scale policy changes emerge. For election reform such a focusing event occurred during the 2000 presidential election, which produced a disputed result and prompted state level election reform and HAVA.

Distinguishing voters might potentially be described through Scenario I. The states have diverse voter identification requirements, and the different types of ID required could potentially be verified by different mechanisms. At first glance, accurate expression and accurate counting might seem to fall into Scenario II: once a technique is developed that allows voters to express their preferences perfectly and then a technique is perfected to count these preferences with 100 percent accuracy, the policy problem is solved.<sup>8</sup> On

further reflection, this is unlikely to be the case; Scenario III is more plausible for both expressing preferences and counting votes.

## **STATE ELECTORAL PROCESSES**

While suffrage and voter registration can highlight different conceptions of democracy – whether it should be more narrowly limited or more broadly offered – the actual electoral processes of the states can provide a reasonably neutral test of the ‘laboratories of democracy’ proposition. We can think of these processes as involving two main domains. One concerns the ability of individuals to run for office, obtain slots on the ballot, and engage in electioneering activities (we call this the ‘campaign’ stream). The other concerns the processes by which individuals cast their votes and have the votes tabulated (denoted the ‘voting’ stream).

The voting stream involves four main elements. The first involves the processes (both rules and practices) for registering to vote. The second concerns the rules and practices for ensuring, on Election Day, that registered voters are allowed to cast their votes and non-registered individuals are barred from voting. The third entails the ability of registered voters to record their preferences accurately in the voting booth. The final element consists of accurately counting the votes.

This paper focuses on the final three elements. The principal reason for this is that the first element – voter registration – is inherently political, and often partisan. Advocates of ‘expansive’ democracy – typically, but not necessarily, Democrats – seek to make voter registration as easy as possible (through such measures as election-day registration). Advocates of ‘restrictive’ democracy – often, but not inherently, Republicans – seek to

create higher bars for registration, limiting registration to those who show more intense interest in and knowledge of electoral processes.

These partisan preferences regarding voter registration have been evident for at least the past twenty years. In 1993 Congress passed the National Voter Registration Act, referred to as the “motor voter” act, to improve access to voting by easing the barriers to initial and continuing registration. The act required states, in addition to their already existing forms of registration, provide voter registration services at the Department of Motor Vehicles (DMV). In addition, states are required to offer registration forms and assistance in completing those forms at public assistance offices and offices providing services to those with disabilities, which, like the DMV, are responsible for delivery of the registration form to the appropriate local election official. The final requirement related to access to registration is the availability of mail-in-forms, which citizens can use to register to vote. The 1993 act passed the House by a 259-164 margin, with 150 of 174 Republicans voting no; it was passed by Senate 62-36, largely along party lines (U.S. House, 1993). Such partisan conflicts continue today and have gained new headlines in part due to a recent Supreme Court decision (*Crawford v. Marion County Election Board* and *Indiana Democratic Party v. Rokita*) which allowed Voter ID requirements in Indiana. Three weeks after the Supreme Court’s decision neighboring state Illinois demonstrated how partisan divisions shape this conflict. In the Illinois House, the Elections and Campaign Reform Committee voted 5-4 along party lines not to pass a law modeled after Indiana’s law.

The other three elements (and especially the final two) are more technical and involve less partisan conflict. Democrats and Republicans can agree, at least in principle, that an

effective electoral process distinguishes between registered voters and non-registered individuals, restricting voting rights solely to the former. Conservatives and liberals can concur, at least philosophically, that the individuals in the voting booths should be able to record their preferences correctly. Republicans and Democrats can see eye-to-eye on the importance of accurately counting the votes, so that the electoral winner is the candidate (or proposition) that receives the most votes.

### **DISTINGUISHING BETWEEN REGISTERED VOTERS AND NON-REGISTERED VOTERS**

This is not to suggest that partisans always and everywhere seek to turn these principles into practice. Determining whether potential voters can actually vote consists of properly distinguishing between registered voters (who are allowed to vote) and non-registered individuals (who are barred from voting). Making this determination involves the possibility of Type I errors (preventing a properly registered voter from casting a ballot) and Type II errors (allowing a non-registered individual to vote). It is difficult (if not impossible) to develop a system that simultaneously minimizes both Type I and Type II errors. Requiring greater evidence of proper registration reduces the possibility of Type II errors, but increases the prospect of Type I errors; requiring less evidence of proper registration amplifies the chance of Type II errors while cutting the likelihood of Type I errors.

A partisan divide exists between those who want to minimize Type I errors (typically Republicans) and those who seek to minimize Type II errors (most often Democrats). This conflict was highlighted most recently in *Crawford v. Marion County Election Board* and *Indiana Democratic Party v. Rokita*, which pitted Republican legislators, who

successfully enacted legislation requiring voters to present photo IDs, against Democrats who argued that such a requirement discriminated against the poor, ethnic minorities, and the elderly.

In principle, it might be possible to identify the electoral processes that are best suited to minimize the total number Type I and Type II errors.<sup>9</sup> As it turns out, it is extraordinarily difficult to determine empirically the effectiveness of the voter verification processes.

Type I errors are, virtually by definition, almost impossible to count: if the state knew a Type I error was occurring, it would prevent it from happening.<sup>10</sup> Logic does suggest that Type II errors are likely to be much more common than Type I errors. Voting is a 'costly' activity with few personal benefits – on reason that turnout rates are relatively low in the United States.<sup>11</sup> Unless the election is expected to be exceedingly close, it is hard to understand why an individual would choose to face penalties (fines or imprisonment) to cast a ballot that has no chance of affecting the outcome. In contrast, precisely because voting is costly we might expect those who take the time and effort to go to the polls to be properly registered. Presenting oneself at the polling place with proper identification is also costly (i.e., one must remember to bring it!). In addition, voters can be properly registered, and bring appropriate identification, and may nonetheless be denied the opportunity to vote because of flawed voter identification lists. Given the costs of voting, and the even higher costs of fraudulently voting, the prospect of Type I errors seem trivial compared to the risks of Type II errors.

The best evidence of Type II errors include instances of provisional ballots not counted and failure by election officials to properly register prospective voters (Driehaus, 2007). Provisional ballots seem to be lead to type II errors most often when a citizen is unable or

unwilling to submit verification within the required timeline (Urbina, 2008). More importantly, voter registration lists have been highly prone to mistakes, keeping eligible voters from casting ballots (Hastings 2006).<sup>12</sup> For example, prior to the 2000 presidential election, some thousands of “suspected” felons were purged from the registration list in Florida; many of the suspects were eligible to vote (Palast, 2000). As a result of the list’s unreliability, Florida discontinued use of the felon list in 2005 for the purpose of voter registration.<sup>13</sup>

Given the inability or the unwillingness of the states to maintain proper voter registration lists, HAVA now requires states to have “a central, independent repository for all registered voters — created by cross-checking voter registrations with existing state records to make sure dead people, incarcerated felons, and others not eligible to cast a ballot were removed from the rolls” (Hastings, 2006: np). No law assures success, however. In 2004, New York City tested its system by trying to match 15,000 voter registration records with license numbers reported on the registration cards. “The results? Nearly 20 percent couldn’t be matched because of typos made by city employees” (Hastings, 2006: np; see also GAO, 2006).

We are thus not able to measure the incidence of Type I and Type II errors in evaluating state electoral processes. We nonetheless describe the provisions and protocols the states use to distinguish voters from non-voters, as well as analyze the distribution of these provisions/protocols. We also consider whether the states are converging towards a single ‘best’ set of practices based on technical considerations (that is, towards ‘effective’ policies) or whether political (or other) matters continue to drive voter identification processes.

Table 1 outlines the current standards regarding voter identification across the states.

What is most noteworthy about this table is the diversity of identification required: some states (i.e., Florida, Georgia and Indiana) require voters to present photo IDs. Many other states accept diverse forms of identification; for example, Alabama allows any of twenty-one different forms of ID (including fishing licenses, utility bills, and electronic benefit cards).

[Table 1 about here.]

Some scholars have expressed concern that certain populations would be disadvantaged by the new identification requirements associated with HAVA. Initial research into the impact of new identification requirements, comparing data from 2000, 2002, 2004, and 2006, suggest they have not reduced participation at the aggregate level (Alvarez, *et al*, 2007). But, individual level data analysis shows when comparing states with the most stringent voter identification requirements to states with the weakest identification requirements, participation of registered voters is negatively impacted. No depression in participation is found by race, but the less educated and those with lower incomes are found to be less likely to participate in elections (Alvarez *et al*, 2007).

Montana may have addressed this problem through an innovative policy solution. They allow anyone forgetting their ID to be verified at the polling place through a state database accessible through the internet. If the citizen without an ID is confirmed they are allowed to proceed to the voting booth. Montana's Secretary of State Brad Johnson commented on the innovation award received as a result of the policy. He stated, "It's great for Montana to be recognized for leading the way in technology. In a state where people often live more than 20 miles from their polling place, this technology allows us

to make sure everyone gets a chance to vote on election day” (Government Technology, 2006). The motivation for this change stemmed from traditional election practices in Montana, which did not require Montanans to bring identification with them to polling stations (CSG, 2005).

### **ACCURATELY EXPRESSING PREFERENCES**

Do Republicans and Democrats actually want the voters to express their preferences accurately? Rhetorically, of course, they do. But, in practice, it may be reasonable to assume that both parties are more interested in winning elections (candidates and ballot measures) than in democratic processes. Whether or not either party can design a ballot, or a voting technology, that their own partisans can use to express their preferences accurately while preventing their opponents to do so seems unlikely in general.

There is one potential exception to this. If one party believes its supporters are better educated and more politically savvy – that is, better able to interpret confusing ballot designs and voting technology – then it might be willing to exploit this belief deliberately to design confusing ballots or technology. If the logic of voter identification holds – with Republicans assuming that Democratic voters are more likely to be poor and ethnic, and hence potentially more easily-confused – then Republicans might be somewhat more inclined to support poor ballot designs. Still, partisan incentives to produce confusing ballot designs are probably modest, at most.

Expressing preferences consists of two elements. The first element involves the ability of the voter to be able to interpret the ballot correctly (so, for example, if the voter prefers Candidate A the voter will be able to locate Candidate A on the ballot). The second element entails actually expressing this preference so that it is accurately recorded: this

involves the interaction between the voter and the voting technology (so that when the voter attempts to activate the button – or switch, or lever, or whatever – the voting technology in fact records this preference.

The complications multiply, however. Voters are not all of one type. Some are highly literate and manually skilled; others, less so. Most voters are fluent in English, but millions are not, having the widest array of languages as their native tongue. Some voters are blind. Developing a ballot (or set of ballots) that is perfectly interpretable to all given their skills is a daunting challenge.

Furthermore, the interaction between voter and machine is vulnerable to two sources of errors: operator and machine. Voters may believe they are activating the proper button when, in fact, they are not. Voters may actually activate the proper button, but the technology may fail to record it (due to technical malfunctions). Still others may activate the proper button, but the technology will not record it accurately because miscreants have rigged the machine. Consequently, it is unlikely – nay, impossible – for a system to be designed so that every voter’s preference is correctly expressed.

Voters must be able to interpret the ballot, correctly identify their candidate (or position on a ballot proposition), and then record their preferences through the voting technology. Fulfilling these requirements indicates attention to ballot design (or presentation, for the blind) and the human interactions with voting technology (these qualities are sometimes called ‘usability’ (Brennan Center for Justice, 2006)). Because elections are highly decentralized in the United States, only a few states have uniform voting technology, as local levels of government typically make the relevant decisions: designing ballots, buy equipment (and also counting votes).

Few published studies compare different voting systems in controlled environments to see which ones are better at accurately recording voter preferences. As an alternative, one can examine the ‘residual vote rate’ – the difference between the number of votes cast and the number of votes recorded. Residual votes can occur through “undervoting” (where no vote is cast for a particular contest on a particular ballot) and “overvoting” (where more than one vote is cast). Overvoting clearly represent mistakes in expressing preferences, while undervoting can occur either because the voter deliberately abstained or because the voter believed a vote was cast although it was not recorded. Evidence suggests that, at least in presidential elections, slightly less than one percent of voters deliberately abstain (Brennan Center for Justice, 2006: 98, citing Knack and Kropf, 2003 and Tomz and Van Houweling, 2003; see also Stewart, 2005). This suggests that residual vote rates much higher than one percent can probably be attributed to inaccurate preference expression.

### ***Ballot Design***

As of 2006, “we do not yet have sufficient data to prescribe a single ‘best’ or ‘most usable’ ballot design [for each type of technology], [although] there is a substantial body of research on the usability of forms (both paper and electronic), instructions and other signage that can be used as guidance” (The Brennan Center for Justice, 2006: 97). It is evident, however, that “ballot format has a significant (both substantively and statistically) effect on unrecorded votes” (Kimball and Kropf, 2005: 526). Moreover, “ballot design deserves closer inspection than it has received thus far, and election officials should consider ballot design decisions carefully” (Kimball and Kropf, 2005: 527).

Differences in ballot design produce different residual vote rates. For example, “full-face” digital recording equipment (also known as computer touch screen, or DRE) where the entire ballot is displayed continuously on one screen typically have higher residual vote rates than “scrolling” screen DRE which use separate, consecutive screens (The Brennan Center for Justice, 2006: 100). Optical screen ballots that require voters to darken an oval had substantially lower residual vote rates than ballots that require voters to connect an arrow with a line to a candidate (The Brennan Center for Justice, 2006: 103)

Some ballot designs are so ill-designed as to be indefensible. Perhaps the most notorious example of this was the “butterfly ballot” used in Palm Beach County, Florida, during the 2000 presidential election. This confusing ballot design (which apparently also violated state law) led to 8,238 votes apparently meant for Al Gore to be discarded because they were overvotes (with the voter marking both the ballot both for Gore and either Reform Party candidate Pat Buchanan or Socialist candidate David McReynolds, whose names appeared immediately above or below Gore’s name) (CNN, 2001: np; see also Dillman, 2002; Kimball, Owens and Keeney, 2004; Sinclair *et al*, 2004; Wand *et al*, 2001).<sup>14</sup> In 2006, Florida was again in the news when a poor ballot design in Sarasota’s House District 13 led to massive 13 percent undervoting rate (Doing and Tamman 2006). More recently, in the 2008 Democratic primary in California, ballots in Los Angeles County required independent voters to fill out a small ‘bubble’ on their ballot sheet before voting. This “double bubble” design led to 7.4 percent of the ballots (94,000 votes) in that county being discarded (Dopp, 2008).

Knowledge gained regarding the relationship between ballot design and the inaccurate expression of preferences by voters would seem to fit well with scenario II. Given the wide variance in ballot design, studies examining best practices of ballot design should allow election officials and voting machine manufactures to design more accurate systems. Some of the initial studies of this process have used an experimental design that simulated actually voting conditions, finding that specific user-interface features result in significant differences in voter errors (Selker, 2008). In particular, bold formatted headlines above races are distracting, candidates running in a small field can be overlooked when placed next to a race with a large field of candidates, and that second-chance voting can reduce errors. This particular study estimated hundreds of thousands of votes could be accurately expressed if improvements in ballot layout were made nationwide (Selker, 2008).

### ***Recording Technology***

We do not know, for certain, how accurate the various voting technologies actually are. One study examined the residual vote rates for the 2000 and 2004 presidential election as well as the 2002 gubernatorial elections, controlling for other factors (such as demographics and electoral competitiveness) that could effect voting outcomes (for full details see Brennan Center for Justice, 2006: 98-104).<sup>15</sup> The most striking findings are that residual vote rates varied by type of technology, within types of technology (i.e., the same technology had different residual vote rates), and across different demographic groups (with poorer and more heavily minority jurisdictions having higher residual vote rates).<sup>16</sup>

Some of the differences are enormous. For example, of the 353 counties using scrolling screen DREs (the type with lower average residual vote rates), the range of residual vote rates across the different DRE brands ranged from 0.3 percent to 6.8 percent (The Brennan Center for Justice 2006: 100). Residual vote rates in jurisdictions with high (over 30 percent) proportions of minorities were typically about 40 - 50 percent higher than jurisdictions with small minority populations; residual vote rates were more than double in low income (median income less than \$25,000) jurisdictions as compared to high income (over \$40,000) ones. Meanwhile, most DREs (at least in 2004) did not allow voters to check to see whether their votes were accurately recorded (CFER, 2005: 25).

There is, unfortunately, no compendium listing state efforts to reform and improve their electoral processes (beyond purchases of new voting equipment) (Stewart, 2005: np). Still, it appears that the states with the biggest problems with their residual vote rates made the greatest improvements.<sup>17</sup> The states with the highest residual vote rates in 2000 had the greatest declines: the average decline was 2.3 percent in states with residual vote rates above two percent; states with residual vote rates of between one and two percent had a decline of 0.4 percent, and states with a residual vote rate of less than one percent actually had a 0.1 percent increase (Stewart, 2005: np). The states that were most aggressive in replacing voting technology (typically, those with punch card systems) also had the biggest declines. The states in which 30 percent or more of voters used new voting machines had averaged a 1.1 percent decline in the residual vote rate; states in which less than 30 percent of the voters had new technology experienced a 0.6 percent decline.<sup>18</sup> The three states (D.C., Georgia and Nevada) that entirely replaced their voting

machines had a 2.4 percent decline in residual vote rates (Stewart, 2005: np). Among the individual counties that adopted new technology, residual vote rates declined twice as much (1.2 percent) as those that did not (0.6 percent).

One form of voting technology (and administration) does seem to stand out as superior (The Brennan Center for Justice, 2006: 102). Precinct count optical scan (PCOS) systems produced undercounting rates that on average were lower than either form of DRE system.<sup>19</sup> (Precinct counts are immediately scanned, so that voters can find and correct any errors.) PCOS systems were also less affected by differences in the ethnic or income characteristics of the jurisdiction. However, residual vote rates still were higher in heavily Hispanic jurisdictions, indicating that language barriers may still be important.<sup>20</sup>

One state appears to be the clear leader on reducing residual vote rates: Nevada. In the 2004 elections Nevada was the only state that used a DRE scrolling screen system with a “voter-verified paper trail” that includes a “none of the above” option.<sup>21</sup> This option reduces undervoting because it distinguishes between abstentions (i.e., none of the above) and accidental non-votes.

## **ACCURATELY COUNTING VOTES**

For democracy to thrive, votes must be counted accurately. Doing so is doubly beneficial. It assures the candidates (or issue advocates) that the winner actually won and that the losers, in fact, actually lost. It also confirms to the voters that their efforts were not in vain.

No party would (publicly) advocate ballot stuffing or dumping.<sup>22</sup> In practice, the party likely to win has strong incentives to have the ballots counted accurately; the likely losers

have stronger incentives to stuff favorable ballots, to dump unfavorable ones, and to rig the counting to favor its interests. The United States has a “long, sordid” tradition of such voting fraud, and it does not appear this tradition will be completely overturned anytime soon (Campbell 2006: see also Gumbel 2005).

Even without fraud, votes can still be miscounted: the accuracy of counting can vary between and within the differing voting technologies. The reason that vote counting cannot be perfected is that manual vote counts are invariably subject to human error, so reducing miscounts almost certainly involves (sophisticated computer) technology.

Partisans will continue to have incentives to rig the counts, however, and as the Commission on Federal Election Reform notes “[a]s experience in computer security shows, it is often difficult to defend against such attacks” (CFER, 2005: 28; for further discussion see 28-30). As a result, we might expect that some jurisdictions will adopt the current best technology, while others do not, waiting until yet better technology is developed before moving forward.

The states (and local governments) have made substantial changes in the voting technology they use this decade. In 2000, five main types of technology dominated (see Table 2 and 3). The good news is that the states are clearly moving away from worse technologies to better ones. Punch card systems – thoroughly discredited in the 2000 presidential election and the controversy over “hanging chads” have almost vanished from use, declining from 17 percent to less than one percent of all counties. Lever machines have seen a similar decline (with their use maintained only by New York). These technologies are being replaced by optical scanners and DRE. Optical scanners are now the dominant technology, growing in use by nearly 40 percent between 2000 and

2006 (in the number of counties; the growth in the percentage of the population using them is much smaller). DRE use has grown much more rapidly, however, more than doubling during that same period by counties, and nearly tripling in terms of the population using them. Given that DRE have not been demonstrated to be better than optical scanners at recording and counting votes, this suggests that factors other than policy effectiveness may be driving purchasing decisions.

[Insert Tables 2 and 3 about here]

The shifting patterns of voting technology adoption reveal two main traits (Figure 1 and 2). First, intrastate variation has declined dramatically: the states became much more homogenous internally between 2004 and 2006 (with the exception of New England). Second, regional patterns are evident: DREs dominate in the states north and east of Louisiana through Pennsylvania (with Georgia and North Carolina the primary exceptions) and in parts of the west (Nevada, Utah, and parts of California). Optical scanners are the norm elsewhere. These regional patterns imply, perhaps, that political rather than technical characteristics dominate.

In the “we don’t know what we don’t know” category, many states do not require manual audits of the “voter verified paper records” produced by their electronic voting technology (whether DRE or optical scan systems) to ensure that the reported votes match the paper records. As of March 2007, only some eighteen states required such audits of randomly-selected precincts, and two other states had legislation pending (Smith and Kibrick 2007).

## **A CASE STUDY IN INNOVATIVE POLICIES: OREGON'S VOTE BY MAIL**

The state of Oregon has been an early adopter of unique policies for many years, a phenomenon likely contributed to by one of the oldest and most permissive direct democracy systems the United States. Oregon is even adopted direct democracy early in comparison to other states, first allowing initiatives in 1902. Citizens and political entrepreneurs in Oregon responded fervently to the initiative, passing so many laws that the direct democracy process became known as the “Oregon System” during the early 20th century (Ellis, 2005). Overall, since 1902 Oregon citizens have passed 35 percent of the 340 initiative measures, 34 percent of the 62 referendums, and 50 percent of the 407 legislative referrals (Oregon Blue Book, 2007). The initiative process in Oregon is relatively easy to use in comparison to many states and as a result legislators often have a more difficult time reversing or altering citizen measures (Bowler and Donovan, 2004).

Some pundits also consider Oregon a bellwether for the national voting trends, in part due to the equally balanced registration numbers between Republicans and Democrats statewide. As Grover Norquist said after the 2007 special election, “If something happens in Alabama, nobody extrapolates, but Oregon is considered light blue, moderate. Oregon is reasonably sane, moderate Democrats, and they said no to something. Then it's unlikely to work in Missouri” (Pope and Kosseff, 2007). Anecdotally, Oregon is also very average. An Associated Press study that found Oregon had the second closest match to national averages on a combination of 21 demographic factors such as race, age, income, education, industrial mix, immigration, and percentage of population in rural and urban locations (Ohlemacher, 2007).

### *The Other “Oregon System”*

One unique factor in Oregon politics is the usage of vote by mail in elections. In Oregon all elections must be conducted exclusively vote by mail. This law was the result of a statewide initiative passed with 67 percent of the vote in 1998 (Southwell, 2004). Other states allow absentee ballots to be submitted by mail, but Oregon is the only state requiring citizens to vote exclusively by mail. First used in 1993 for a statewide election, the use of vote by mail exclusively for all state and federal elections was made law with the passage of Measure 60 in 1998 (Dover, 2005).

The system allows two weeks for voters to return ballots to their county clerk either through the mail or by returning it in person. Although the system remains popular with residents, some have criticized the practice by suggesting it erodes the civics lessons associated with voting among fellow citizens in a public polling place. In addition, concerns of vote fraud and coercion have been cited due to the potential lack of secrecy associated with voting in a private residence (Dover, 2005). Partisan concerns also emerged during the initial implementation in the 1980s, as Democratic Party leaders were suspicious of Republican Secretary of State Norma Paulus’s motivation. Interestingly, during the 1990s the many Republicans claimed vote by mail would disadvantage them in elections. But, contrary to some claims of that vote mail would advantage Republicans (Jefte and Jefte 1990; Hamilton 1988; Karp and Banducci 2001; Mutch 1992; Oliver 1996; Patterson and Caldeira 1988; Rosenfeld 1995) or Democrats (Burnham 1982; Piven and Cloward 1988; Radcliff 1994), recent research has shown that neither party loses or gain any significant benefits from vote by mail (Southwell, 2004). Instead, studies of Oregon voters have shown vote by mail increases turnout among sets of

individuals, women, young people, the disabled, and homemakers, while not significantly changing the composition of the electorate (Southwell, 2004). An additional benefit of vote by mail is the potential for , decreased voter error, as voters have more time to vote and thus may be less likely to misinterpret voting instructions. Table 4 shows this claim may be true regarding voter drop-off, when a voter does not cast a vote for a particular candidate, but still casts their ballot.

[Insert Table 4 about here]

### ***The Slow Growth Laboratory***

The emergence of vote by mail in Oregon was sudden, but slow in its progression towards statewide usage. During a personal interview with Norma Paulus, Republican Secretary of State from 1977-1985, described how vote by mail first emerged in Oregon (Paulus, 2008). In the late 1970s Oregon as a state was losing population, partially a burden of a declining timber industry. Combined with a drop in civic participation following the resignation of Richard Nixon and the Vietnam War, the political environment in which Norma Paulus entered office was quite different than only a few years earlier. As a result, Paulus vowed to lessen the burden associated with voting, a goal in part prompted by a newly mobile working population that no longer worked and lived in the same community. The realization that bedroom communities were becoming more common caused Paulus to ask the state legislature to allow “no excuse” ballots, a request quickly dismissed by both political parties. Just a year earlier a leader of the Oregon AFL/CIO, Nellie Fox, also expressed interested in making process of voting easier, believing postcard registration would increase participation. At the time postcard

registration did not exist in the United States, but after some debate the idea became law in 1976.

Thus, Oregon had allowed the first convergence of voting and the postal service. Still, at this time vote by mail was not under consideration, or even being discussed by politicians in the state. The passage of a bond measure in a small town (Albany) in Oregon brought the concept to the forefront. Dell Riley, the county clerk of Linn County called Norma Paulus from Albany to report that a bond measure had passed and that two people, out of approximately 10,000 registered voters, had cast ballots. Deeply disturbed, Paulus and her staff decided to investigate methods to ease the burden of voting. In their research they discovered California allowed cities to conduct electric district elections by mail. The city of San Diego had been utilizing this system and Paulus concluded this method might increase turnout for elections. She asked a delegation of 2 Democrats and 2 Republicans to visit San Diego to witness an election conducted by mail. After the trip, one of the participants, Speaker of House, Hardy Meyers (D), introduced a bill to allow vote by mail for elections. The response from many legislators and interest groups in Oregon was not favorable and the legislature took no action. After a year of promoting the idea, Paulus made over 500 speeches on the topic around the state, a compromise was reached allowing vote by mail for special district elections, but not primary and general elections. Thus, in 1981 vote by mail was introduced in Oregon in a limited role. It remained in that limited role until Phil Keisling (D) became Secretary of State (1991-1999) and implemented the first statewide vote by mail election in 1996.

During the fifteen year interim, expansion of vote by mail was attempted many times, but was stymied by a Secretary of State not supportive of the system on principle (Keisling,

2008), House Democrats, and then Republicans, who believed it would hurt them in elections, and a Democratic governor who vetoed a Republican sponsored bill in 1995. The barriers were lifted in 1995 when Bob Packwood resigned and by Oregon state law the secretary of state was responsible for deciding how to hold the special election to find a replacement. Phil Keisling, who during his tenure had seen absentee ballots rise to 60% of the total votes cast, decided to conduct the election exclusively by mail. The election was held in January of 1996 and in 1997 the legislature again debated statewide expansion of vote by mail. But, again the proposal was blocked in the legislature. In 1998 expansion was determined directly by voters, who passed an initiative that mandated the use of vote by mail for all elections in Oregon.

Sense Oregon's adoption of vote by mail other states have started to move towards the "Oregon System" of vote by mail. Three states, California, Washington, and Colorado, operate election systems in which a large percentage of citizens cast their votes through the mail. These states allow voters to file permanent no excuse absentee ballots. Much like Oregonians, voting by mail is progressively becoming more popular with voters in these states. For example, in 2006 41.5% of Californians voted by mail, up from 24% in 2000. The change is probably attributable to a 2001 California law that allowed citizens to register as a permanent vote-by-mail voter (CA, 2008). In 2008, Colorado considered conducting the 2008 election exclusively vote by mail, a discussion driven in part by security and budgetary concerns regarding electronic voting technology (Johnson, 2008). Finally, in Washington almost all counties are exclusively vote by mail with the majority of voters casting their ballots through the postal service.

Other states have made a softer move towards the “Oregon System.” Twenty-four states offer “no excuse” absentee voting, which requires voters to apply for an absentee ballot for each election, but allows them to vote through the mail without exception. The trend toward “no excuse” absentee voting has quicken since 2000, as 12 of the 24 states started allowing “no excuse” absentee voting after 2000 (Goodman, 2008). In addition, by 2004, 20 percent of all votes cast were submitted either early or by absentee ballot (Goodman, 2008). Still, Oregon remains the only state with a requirement that citizens vote by mail system.

The evolution of vote by mail demonstrates interconnections between the levels of government are not always federal and state exchanges. The first vote by mail model was borrowed from a municipality and implemented by largely independent county clerks. The laboratory process was also slow, occurring over a 27-year period in Oregon. This slow evolution may have contributed to eventual statewide passage, as county clerks were able to practice and improve the processes required to conduct vote by mail many times. In addition, the elections for which vote by mail was utilized were lower profile and less subject to media attention, thus mistakes made as part of the learning process were probably more tolerable.

## **CONCLUSIONS**

This preliminary foray into the question as to whether the states are effective laboratories of democracy with respect to their electoral processes leaves us ambivalent. Given the importance of elections, and the long experience the states have with running them, it would seem that if the promised land has not yet been reached, it should be in sight. It is not. State electoral processes do not do as well as they could to distinguish voters from

non-voters, to ensure that voters can accurately express their preferences, and to guarantee that the votes are precisely counted. Elections remain vulnerable to error, both premeditated and accidental.

States imperfectly distinguish between voters and non-voters at the polls. While attention is appropriately paid to Type I errors (letting non-registered individuals vote), it appears that Type II errors (barring registered voters from voting) are far more common. The solutions, while not easy, are clear: yet greater attention must be paid to improving voter registration lists and to assisting the public so that voters will come to the polls with the required identification. Unless the federal government provides sufficient resources and incentives, we question whether the states will on their own resolve these challenges.

Given the flaws that have plagued ballot design, it might seem self evident that if the states actually were laboratories of democracy, these problems would have been fully diagnosed and corrected by now. But this does not seem to be the case. On the one hand, the states have substantial guidance concerning ‘best practices’ in ballot design and administration across the major voting technologies (see, for example, U.S. Election Assistance Commission 2007). On the other, the states (and more often, local governments) remain free to adopt or reject these practices. Absent federal incentives, the extent to which these government will adopt the best practices remains an open question.

The states – prodded by HAVA and the election debacle of 2000 – have greatly improved their voting technologies. Still, the states have not moved uniformly towards adopting the best technologies and ensuring that these technologies accurately record and count the votes.

The states have a long way to go to perfect (to the extent this can be done) the ways that voters express their preferences. Yet that they have made substantial progress is also clear. Using available data, Stewart (2005) calculated that the residual vote rate had declined from 1.91 percent in the 2000 presidential election to 1.07 percent in 2004 among the 35 states for which data were available. If these numbers are accurate, the 2004 election will have recovered some one million “lost” votes.<sup>23</sup>

Despite the substantial progress made in state electoral processes during the first decade of the 21<sup>st</sup> century, much remains to be done. One study concluded that “Not one U.S. state currently uses all the fundamental measures that are required to ensure accurate elections – paper ballots, scientific post-election manual audits, verifiable ballot security, ballot and voter reconciliation, and public access to election records” (Dopp 2008: np). Until these steps are taken, the laboratories have much to do before they become fully democratic.

## FOOTNOTES

**TABLE 1**  
**VOTER VERIFICATION REQUIREMENTS AT THE POLLS**

<b>Type of Verification</b>	<b>Description</b>	<b>States</b>
Minimum HAVA	Verification required of first-time voters who registered by mail and did provide verification with their registration application.	California, District of Columbia, Idaho, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, Oklahoma, Oregon, Rhode Island, Utah, Vermont, West Virginia, Wisconsin, Wyoming
Photo and Non-Photo ID for All Voters	Photo and non-photo verification accepted.	Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, Kentucky, Missouri, Montana, New Mexico, North Dakota, Ohio, South Carolina, Tennessee, Texas, Virginia, Washington
Photo ID	Voters without photo identification can cast provisional ballots. These ballots are verified and counted based on state regulations. (See notes below. )	Florida, Georgia, Indiana
Photo ID Requested	Voters without photo identification can sign affidavits and cast regular (non-provisional ballots).	Hawaii, Louisiana, Michigan, South Dakota
Photo and Non-Photo ID	Require ID of all first-time voters.	Kansas, Pennsylvania

Notes: Florida voters lacking required ID must cast provisional ballots. The canvassing board determines the validity of the ballot. In Indiana, if the voter is unable or unwilling to present photo ID on Election Day, they may cast a provisional ballot. They have until noon 10 days after the election to follow up with the county election board and either provide photo ID or affirm one of the law's exemptions applies.

Source: Pew Center on the States – electionline.org

**TABLE 2**

<b>PERCENTAGE OF PEOPLE USING VOTING TECHNOLOGIES (2000-2008)</b>			
	2000*	2004**	2008***
Punch Card	34.4	13.8	
Optical Scan	27.5	33.7	
Lever	17.8	13.9	
DRE	10.7	30.8	
Paper Ballots	1.3	0.7	
Mixed (Within County)	8.1	7.2	
Total	100	100	100

Sources: \*(NCFER, 2001) \*\* (Kimball, 2004)

**TABLE 3**  
**PERCENTAGE OF COUNTIES USING VOTING TECHNOLOGIES**  
**(2000-2008)**

	2000	2004	2006
Punch Card	16.93	9.92	0.42
Optical Scan	41.09	45.44	56.19
Lever	13.94	8.64	1.99
DRE	11.38	21.68	36.63
Paper Ballots	11.89	9.60	1.83
Mixed (Within County)	4.79	4.82	2.95
Total	100	100	100

Sources: (Electronic Data Services, 2008)

**TABLE 4**  
**2004 GENERAL ELECTION DROP-OFF**  
**OREGON VS. ALL OTHER STATES**

	Obs	Mean	Std. Dev.	Min	Max
<u>Oregon</u>					
President Drop-off	1	0.8	.	0.8	0.8
Senate Drop-off	1	3.8	.	3.8	3.8
House Drop-off	1	4.3	.	4.3	4.3
<u>All Other States</u>					
President Drop-off	47	1.1	0.6	0.0	2.6
Senate Drop-off	32	4.2	3.5	0.0	17.8
House Drop-off	45	8.8	7.7	0.7	32.0

Source: Election Assistance Commission

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Notes:

“nd” means “no publication date given”.

“np” means “no page number”.

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<sup>1</sup> As Walker defines it, a policy innovation is “a program or policy that is new to the state adopting it” (Walker 1969: 381).

<sup>2</sup> For example, it is certainly debatable ‘three strike’ laws, and mandatory minimum sentences are effective at accomplishing their main purposes (reducing crime rates), but that they became politically popular among the states is without question.

<sup>3</sup> The remainder of this section excerpts Rom (2007: 261-64).

<sup>4</sup> The analogy might include determining whether credit cards are valid, whether orders are properly placed, and reconciling the books.

<sup>5</sup> Exceptions include constitutional provisions regarding suffrage, as well as anti-bias provisions in such federal laws as the Voting Rights Act of 1965.

<sup>6</sup> Note, for example, the extensive literature assessing the impact of the Head Start program (citations?)

<sup>7</sup> This assumption is certainly not accurate, as states may have many political reasons for *not* wanting to adopt the best policy.

<sup>8</sup> As expressing preferences involves both ballot design and recording technologies, Scenario II might describe ballot design.

<sup>9</sup> Doing so does involve normative considerations: Should a registered voter denied the right to vote count the same as a non-registered voter who casts one? Republicans and Democrats surely disagree about this.

<sup>10</sup> We note that Indiana Secretary of State Todd Rokita conceded before the Supreme Court that the state had not identified a single case of “voter impersonation” by a non-registered voter, and non-registered voters do not have much incentive to step forward to reveal their fraud. For its part, the U.S. Department of Justice has between 2002 and 2005 charged only 89 individuals for “multiple voting, providing false information on their felon status, and other [voting] offenses” (Commission on Federal Election Reform (CFER): 45; citing DOJ 2005).

<sup>11</sup> Indeed, one of the puzzles facing rational choice theory is why individuals vote at all in major elections (Shapiro and Green 1994: 47-71).

<sup>12</sup> The problems are both administrative (rolls have not routinely been updated, for example) and demographic (the American public is fairly mobile, so voters often change residences between elections).

<sup>13</sup> In addition to improper registration, barriers to registration also exist for citizens. A 2001 report by the Cal Tech/MIT Voting Technology project estimated that approximately 3 million voters nationwide cited difficulties encountered with voter registration systems as the primary reason they did not vote (CalTech/MIT, 2001). A 2006 survey of a national sample found 10% of American adults believe the voter registration process in their state is difficult (Alvarez, Hall, and Llewellyn, 2008).

<sup>14</sup> George Bush also lost 1,631 votes to the same overvoting problem.

<sup>15</sup> This research also reviewed smaller more localized studies.

<sup>16</sup> Other research indicates that voters with reading disabilities have more difficulty with full-face DRE (The Brennan Center for Justice 2006: 106)

<sup>17</sup> Eleven states, comprising one quarter of the population, do not report voter turnout so calculating residual votes is not possible in those states. At the time of the report, three states had not yet reported turnout.

<sup>18</sup> The latter category comprised about half of the voting population.

<sup>19</sup> The specific technology used by the PCOS systems were the ES&S Optech Eagle, the ES&S M100, and the Diebold AccuVote-OS.

<sup>20</sup> For a discussion of vote by mail residual rates, see Brennan (2006: 103).

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<sup>21</sup> The Brennan Center notes that NV has unique ballot options, which may also reduce the residual vote rate (2006: 101 fn.12).

<sup>22</sup> We place concerns about ballot stuffing or dumping in this section, although arguably it should appear in the previous section.

<sup>23</sup> Stewart attributes this decline in the residual vote rate to improved equipment, better informed poll workers, more active election officials, and the competitiveness of the election (2005).