DEMOCRACY INDEX CONFERENCE

SEPTEMBER 28 - 29, 2007

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This project has been made possible by the generous assistance of The Pew Charitable Trusts and its Make Voting Work initiative, with support from:

AEI-Brookings Election Reform Project

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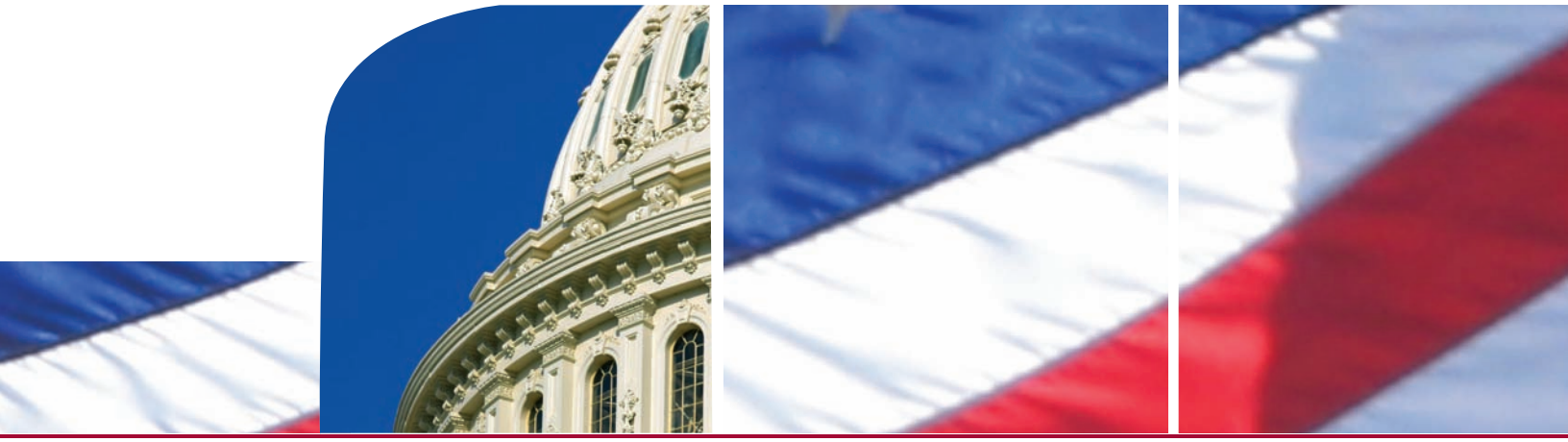

HOSTED BY:

Election Law@Moritz

The Ohio State University Moritz College of Law

Columbus, OH

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CONFERENCE PLANNING TEAM:

Michael Caudell-Feagan, *The Pew Charitable Trusts*
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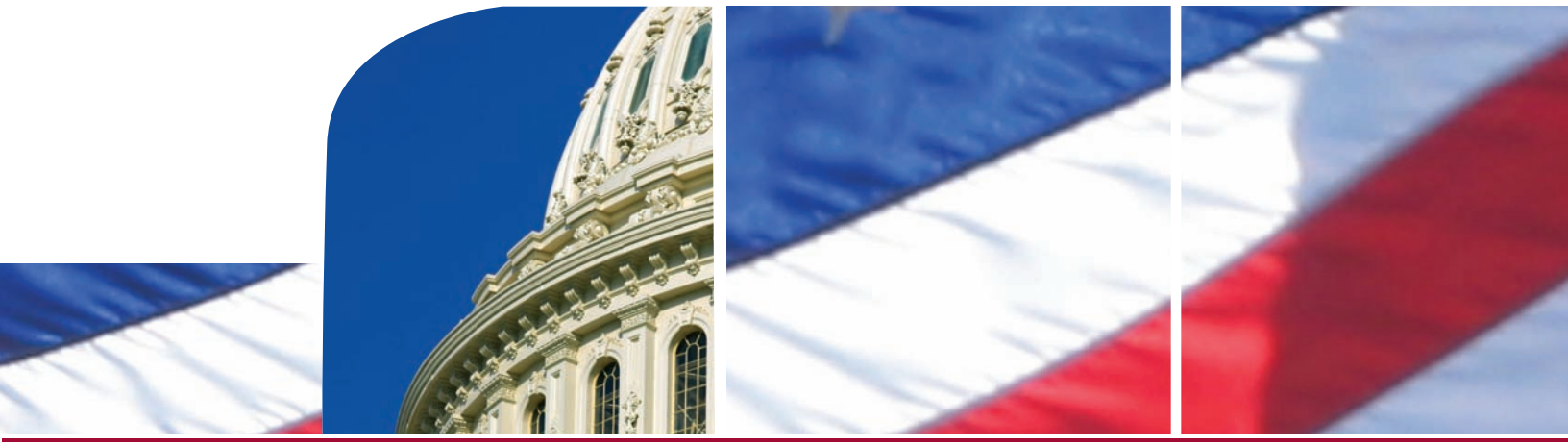

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Democracy Index Conference

Thursday, September 27

6:45	Dinner, *Barcelona*	

Friday, September 28

8:30	Buffet Breakfast	
9:00	Introduction:	Ned Foley & Heather Gerken
9:15	**First Comparative Perspective**	
	Environmental Metrics	Dan Esty
10:00	**Registration**	
	Moderator:	Dan Tokaji
	Mini-Memo Contributors:	Karin Mac Donald Michael McDonald Dean Alger
11:15	Break	
11:30	**Casting Ballots**	
	Moderator:	Heather Gerken
	Mini-Memo Contributors:	Conny McCormack Caroline Tolbert Bob Stein
1:00	**Second Compartive Perspective** (working lunch)	
	Educational Metrics	Lynn Olson
2:30	**Counting Ballots**	
	Moderator:	Ned Foley
	Mini-Memo Contributors:	Doug Chapin Martha Kropf Cameron Quinn

3:45	Break	
4:00	**Post-Voting Procedures**	
	Moderator:	Steve Huefner
	Mini-Memo Contributors:	Matt Damschroder Thad Hall
7:00	Dinner, *Latitude 41*	

Saturday, September 29

8:00	Buffet Breakfast	
8:30	**General Considerations**	
	Moderator:	Doug Chapin
	Mini-Memo Contributors:	Bruce Cain John Fortier Heather Gerken Paul Gronke Charles Stewart
9:45	Break	
10:00	**Assessment of Conference Discussion & Next Steps**	
	Moderator:	John Fortier
11:15	Break	
11:30	Summation:	John Fortier
Noon	Adjournment	
	Lunch, *a near-campus eaterie*	

DRAFT: September 24

Democracy Index Conference:
MASTER LIST OF POTENTIAL METRICS

To: All Conference Participants
From: Ned Foley

What follows, in outline form, is a list of all potential metrics for inclusion in a Democracy Index that I have gleaned from reading all of your mini-memos. As you will quickly see, there are more candidates for inclusion than likely "spots" available in any realistic Democracy Index. By way of comparison, the education and environmental indices that we will be hearing about have somewhere between 10 and 20 metrics that form the backbone components of those indices.

Thus, as I see it, one task for our conference is to evaluate the potential metrics on this list, endeavoring to appraise which appear to be the most promising—especially in a near-time horizon (by imaging an operational Democracy Index in 2012, let's say). It is possible that some of the many items on this list could be aggregated in order to get to 10-20 metrics that are comprehensive. But, conversely, there appears to be a potential danger in aggregation, at least too quickly, in that doing so would hide difficult challenges in both defining exactly what is to be measured and in collecting the relevant data.

As long as this list is, an important first step is to ask whether there are any items missing from this initial list, before we begin collectively to winnow it down. Therefore, between now and Friday, if any of you think I missed something that ought to be included as a candidate for discussion, please let me know. I am hoping that this "Master List of Potential Metrics" can work as a point of reference for focusing and organizing our discussions on Friday and Saturday.

One final note: in developing the outline for this list, I have tracked the original outline of "Mini-memo Topics and Sub-Topics," putting specific potential metrics under the sub-topic to which they most appropriately apply. In some cases, a metric fits in more than one place and I've attempted to cross-reference. For those metrics mentioned in mini-memos that don't fit within any previously identified sub-topic, I've put them up front within one of the 5 main topic areas: for example, 1.0.1, immediately below.

As always, I welcome any questions or comments, and I look forward to seeing you later this week!

1 Registration

1.0.1 How many voters appeared at precincts on Election Day, believing they were registered to vote, only to be told they did not appear on the registration rolls?

[Is this number the same, or close enough to, the number of provisional ballots cast because poll workers could not identify the voter as registered?]

1.0.2 Number of registration applications rejected for the following reasons [expressed as a percentage of all registration applications]:

1.0.2.1 Late submission by voter

1.0.2.2 Late submission (or non-submission) by third-party group

1.0.2.3 Incomplete information supplied by voter

1.0.2.4 Late submission to election officials by DMV or other government agency [presumably invalid reason to reject]

1.0.2.5 Administrative error [registration should have been accepted]

1.0.3 Quality of voter education and outreach efforts, including state's voter-accessible website?

1.1 Database Accuracy

1.1.1 Number of provisional ballots cast because of unclear registration status, which were subsequently counted once registration confirmed—expressed as a percentage of total number of registered voters

1.1.2 Post-election audit of rejected provisional ballots, cast because of unclear registration status, to see if any additional provisional ballots should have been counted

1.1.3 Percentage of registered voters who are ineligible to vote (e.g., felons, non-citizens, non-residents, etc.)

1.1.4 Independent audits of state registration databases to determine percentage of entries containing errors

1.1.5 “Expert” grade for state’s database maintenance procedures?

1.1.6 Number of DMV registrations not forwarded to election officials by specified data. [other metric of coordination between election officials and DMV?]

1.1.7 Various “proxy” measures: purges, transfers, new entries, etc.?

1.2 Voter Verification of Registration; Ease & Accessibility of Registration

1.2.1 Does state provide easy method to verify registration?

1.2.2 Does state provide “FedEx” type tracking service?

1.2.3 Does state provide online or automatic registration?

1.2.4 Does the state provide timely notice to individuals whose registration applications are rejected, with opportunity to correct the problems?

1.2.5 Number of eligible voters in state who lack access to registration information in primary (non-English) language?

1.2.6 How much money does state spend, per eligible voter, on facilitating voter registration?

1.3 Timeliness of Registration Processing

1.3.1 Number of days prior to Election Day an eligible citizen must register (zero, for EDR states, receiving highest score)

1.3.2 Electronic registration for overseas voters

1.3.3 Average time between submission of registration form and entry into database

1.4 Provisional Ballots Rejected Because Voter Was Not Registered

1.4.1 See also 1.1.1 & 1.1.2, above

1.4.2 Of provisional ballots cast because voter was not registered, how many were:

1.4.2.1 Counted because registration was verified [same as 1.1.1];

1.4.2.2 Counted because, even though voter was not registered, officials willing to qualify ballot by substantively eligible voter

1.4.2.3 Rejected but should have been counted because upon further investigation voter was in fact registered [same as 1.1.2]

1.4.2.4 Rejected because no voter registration application can be located

1.4.2.5 Rejected because voter registration application was late

1.4.2.6 Rejected because voter registration application was missing material information

2 Casting Ballots

2.0.1 How many voters appeared at the wrong precinct on Election Day?

2.0.1.1 How many of these cast provisional ballots that did not count?

2.0.1.2 How many of these left the wrong precinct w/o casting any ballot?

2.0.1.3 How many cast a provisional (or regular) ballot that did count?

2.0.1.4 How many went to a different precinct and cast a ballot that counted?

2.0.2 How many voters were asked to show an identification card on Election Day in ways contrary to state and federal law?

2.0.3 How many (otherwise eligible) voters fail to cast any ballot, either regular or provisional, because of lack of proper ID as required by state law?

2.0.4 How many voters who asked to receive a provisional ballot were denied one and thus unable to cast any ballot?

2.0.5 The total number of voters who went to a polling place on Election Day but left without casting any ballot, whether regular or provisional?

2.0.6 Total number of provisional ballots cast, whatever reason, whether counted or not

2.0.7 How many voters had their eligibility challenged when they went to vote at a polling place, and was this challenge resolved by:

2.0.7.1 Voting a regular ballot

2.0.7.2 Voting a provisional ballot that ultimately was counted

2.0.7.3 Voting a provisional ballot that was ultimately rejected (because voter was indeed ineligible)

2.0.7.4 Individual leaving the polling place without casting a ballot

2.0.8 Voting machine allocation ratios: number of registered or expected voters per machine

2.0.8.1 Average over all precincts

2.0.8.2 Variation among precincts

2.0.9 Poll worker allocation ratios: number of registered or expected voters per poll worker

2.0.9.1 Average over all precincts

2.0.9.2 Variation among precincts

2.0.10 Overall number of "tainted" ballots (counted but subject to procedural irregularity)?

2.0.11 Degree of deviation from bipartisanship, or nonpartisanship, of poll workers?

2.0.12 Amount and quality of poll worker training?

2.0.12.1 Number of hours of poll worker training

2.0.12.2 Number of dollars spent on poll worker training

2.1 Time It Takes To Vote

2.1.1 What was the average waiting time to check in at the precinct?

2.1.2 Also, time between checking in and casting a ballot

2.1.3 Also, total time it took a voter to vote, including transportation

2.1.4 Also, average number of people in line

2.1.5 Absentee ballots:

2.1.5.1 Average time between request & receipt (or response)

2.1.5.2 Percentage of requested absentee ballots uncast

2.1.5.3 Percentage of absentee voters who never received timely ballot despite request

2.1.5.4 Percentage of submitted absentee ballots rejected because late

2.1.5.5 Extra points for states that email absentee ballots and permit emailed ballot applications (not email of voted ballots)?

2.1.6 Possible alternative measures of voting convenience

2.1.6.1 Location of polling places

2.1.6.2 Aggregate voter turnout as a "proxy" for convenience

2.1.6.3 Voter survey on level of satisfaction with voting experience

2.2 Polling Place Breakdowns & Problems

2.2.1 Number of voting machine breakdowns, or number of minutes voting machines "off line" because of breakdown

2.2.2 Number of poll workers who fail to report for duty

2.2.3 Average number of minutes polling places open late

2.2.4 Average number of minutes polling place hours are extended because of problems during Election Day

2.2.5 What percentage of voters experienced a breach in the secrecy of their ballot?

2.2.6 How many voters experienced difficulties in using the voting technology on Election Day?

2.2.7 Number of precincts that run out of ballots

2.2.7.1 Amount of time precincts "close down" during the day because of lack of ballots to vote

2.2.7.2 Number of individuals who leave precinct unable to vote because of ballot shortage

2.2.8 How many voters reported complaints about the voting process at their polling place:

2.2.8.1 Complaints about machines

2.2.8.2 Complaints about poll workers

2.2.8.3 Complaints about other voters, interest groups, media, or observers

2.3 Uncounted Ballots Because of Ballot-Casting Problems

2.3.1 Number of submitted absentee ballots that are rejected, because:

2.3.1.1 Late

2.3.1.2 Post Office fails to deliver them

2.3.1.3 Incomplete

2.3.1.4 Signature does not match

2.3.1.5 Spoiled ballot (attempt to vote two ballots, etc.)

2.3.1.6 Submission of ballot by unauthorized third-party

2.3.1.7 Envelope not sealed or other breach of ballot security

2.3.2 Number of provisional ballots rejected, because:

2.3.2.1 Voter lacked required ID

2.3.2.2 Voter at wrong precinct [same as 2.0.1.1]

2.3.2.3 Lack of signature match

2.3.2.4 Spoiled ballot

2.3.3 Residual vote rate

2.3.4 Number of voters who received an incorrect ballot

2.4 Ballot Design

2.4.1 Independent/expert assessment of ballot design?

2.4.2 Voter survey on ballot design?

2.4.3 Undervotes, overvotes, or "wrong candidate selected,"-- attributable to faulty ballot design (butterfly ballot problem, FL-13?, etc.]

2.4.4 Extra points for states that permit voters to verify accuracy of ballot choices?

3 Counting Ballots

3.0.1 Wrongly excluded ballots by sub-categories:

3.0.1.1 Absentee ballots that were erroneously rejected

3.0.1.1.1 Including absentee ballots not counted because of local practice to skip counting these ballots when races are not close enough for them to make a difference

3.0.1.2 Provisional ballots that were erroneously rejected [see also 1.1.2 & 1.4.2.3]

3.0.2 Voter confidence on whether their own ballot was counted

3.0.3 Voter confidence on overall accuracy of the election results

3.1 Tabulation Errors

3.1.1 Valid votes not read by machine or counted manually by time of certification

3.1.2 Transcription or transmission errors during canvassing, not corrected before certification

3.1.3 "Phantom" or extra votes (not corresponding to cast ballots) included in vote count as a result of machine or software error, not correct before certification

3.1.4 Overall rate of tabulation errors

3.2 Unverified (excess) ballots

3.2.1 Number of ballots cast at a precinct in excess of the number of individuals who signed in to vote

3.2.1.1 Calculated on a statewide basis as percentage of total ballots cast

3.2.1.2 Total "excess" calculated regardless of whether number of counted ballots was "randomly reduced" by this amount

3.3 **Ballots Counted Although Cast by Ineligible Individuals**

3.3.1 Felons (where applicable)

3.3.2 Not U.S. citizens

3.3.3 Not residents of jurisdiction where voted

3.3.4 Not of voting age

3.3.5 Multiple ballots cast by same individual

3.3.6 Total ineligible ballots included in certified results

3.4 **Transparency & Verifiability of Counting Process**

3.4.1 "transparency grade" for each state based on expert assessment

3.4.1.1 Counting processes observable by public, media, etc.

3.4.1.2 Counting rules: clear and understandable

3.4.2 "verifiability" grade for states, according to the quality of their auditing processes

3.4.3 "non-partisanship" grade for states, based on degree to which counting process is conducted by partisan officials

4 **Post-Voting Procedures**

4.1 **Verification of provisional ballots: accuracy & speed**

4.1.1 [sub-categories of provisional ballot casting and counting rates, as reflected elsewhere in this list of possible metrics]

4.1.2 Number of days after Election Day voters have to supply missing information or identification

4.1.3 Were provisional voters informed of their opportunity to learn whether their ballot was counted?

4.1.3.1 Expert assessment of the quality of this information

4.1.3.2 Survey of provisional voters to determine quality of this information

4.1.3.3 Percentage of provisional voters who took advantage of this opportunity (perhaps controlled by degree to which races were competitive)

4.1.4 Were provisional voters whose ballots were rejected given any opportunity to contest the rejection of those ballots?

4.1.5 Number of days after overseas absentee ballots deadline [ED+10] that it takes to complete verification of provisional ballots

4.2 **Administrative recounts (and audits): accuracy & speed**

4.2.1 Average number of days between Election Day and certification of results

4.2.2 [accuracy of certified results, as reflected elsewhere in possible list of metrics]

4.2.3 [quality of audit procedures, assessed by experts, as reflected in 3.4.2, above]

4.3 **Litigated Election Contests**

4.3.1 Percentage of close elections (margin of victory less than one percent?) since 2001 that have been contested

4.3.2 Percentage of contested elections since 2001 where certified result has been invalidated

4.3.3 Average duration of election contests

4.3.3.1 Measured as between date of filing and date of resolution, or

4.3.3.2 Between date of certified result and date of resolution, or

4.3.3.3 Between Election Day and date of resolution

4.3.4 Qualitative assessment of state's election contest rules & procedures

4.3.4.1 Degree of non-partisanship

4.3.4.2 Degree of clarity and specificity of relevant rules

4.3.4.3 Efficiency of specified timetable for contests

4.4 **Unresolved Elections by Time for Taking Office (or Presidential "Safe Harbor" Deadline)**

4.4.1 Average number of unresolved elections, since 2001, on date for taking office

4.4.2 Average number of all elections, whether presidential or not (including non-presidential years), that remain unresolved five weeks after Election Day—which would "Safe Harbor Deadline" in a presidential election

4.4.2.1 Average number of days beyond this 5-week deadline for those elections that remain unresolved beyond this date

4.4.3 For those elections that remain unresolved on January 1, the average number of days beyond January 1 that they remain unresolved

5 <u>General Considerations</u>

5.0.1 Overall level of expenditures for election administration?

5.0.1.1 Variation within localities of level of expenditures for election administration?

5.0.2 Non-partisanship & professionalism in general

5.0.2.1 Should states receive a negative grade to the extent they permit election officials to engage in partisan activities, like fundraising?

5.0.2.2 Should states be evaluated on the extent to which their ethics laws prevent local officials becoming dependent on machine vendors?

5.0.2.3 Should states be rewarded to the extent they adopt programs for the professional certification of their local election officials?

5.0.2.4 Should states be rewarded to the extent that they adopt procedures for "auditing" the content of their election laws, in order to improve clarity and specificity?

5.1 Voter Satisfaction

5.1.1 What particular elements of voting process, other than those specifically mentioned above, should be measured in terms of voter satisfaction?

5.1.2 Should the Democracy Index include an overall assessment of voter satisfaction, including an effort to survey eligible citizens who chose not to vote?

5.2 Expert & Peer Assessment

5.2.1 Expert assessment of overall quality of a state's performance: apart from possible expert assessment of different elements of the election administration process (as described in various places above), should the Democracy Index project ask a panel of experts to give each state an overall grade?

5.2.2 Peer assessment: should the Democracy Index survey state and local election administrators, asking them to score other jurisdictions based on their impressions on quality of performance?

5.2.3 Should the Democracy Index contain some form of general assessment of the professionalism/competence or non-partisanship of state and local election officials?

5.3 Local Variation within States

5.3.1 Which statistics measured at a state level are especially important to measure at a local level as well, in order to assess the degree of local variation within states?

5.3.1.1 The casting & counting of provisional and absentee ballots?

5.3.1.2 The length of lines and voter waiting times?

5.3.1.3 The enforcement of voter identification requirements?

5.3.1.4 Ratio of machines and poll workers to number of registered (or expedited) voters?

5.3.1.5 Amount and quality of poll worker training?

5.3.1.6 Degree of nonpartisanship in performance of election administration functions?

5.3.2 Is it possible to develop a general measure of local variability—a variation index?

Voter Registration: Database Accuracy

Prepared for Democracy Index Conference, Columbus Ohio. Sept 28-29, 2007.
Michael P. McDonald, George Mason University

All U.S. states excluding North Dakota require voters to register before being permitted to vote. These records must be stored to enable processing of voters on Election Day. The Help American Vote Act of 2002, Sec. 303 requires states to maintain a "single, uniform, official, centralized, interactive computerized statewide voter registration list…of every legally registered voter in the State." This memo's purpose is to describe threats to the accuracy of voter registration lists and how to measure their accuracy.

Importance of Voter Registration List Accuracy

Voter registration lists serve many important purposes. In addition to ensuring everyone who votes is registered, voter registration lists are used to communicate polling place locations and other election information such as voter guides, to transmit absentee ballots, and to select persons eligible for jury duty. Political parties and campaigns use voter registration lists to send targeted campaign messages, for voter mobilization efforts, and to determine underlying partisanship of geographies during redistricting. Polling firms use voter registration lists to conduct registration-based sampling surveys. Academics use voter registration lists for various research projects, such as the effect of mobilization messages on voter turnout.

Election administrators, political parties, candidates, polling firms, and academics thus all prefer accurate voter registration files. Voter registration files' validity is threatened on two accounts. First, there is deadwood, people who are registered at an address but are no longer eligible to vote for any reason including that they have moved, died, or have changed their eligibility status because of a felony conviction. Second, the information on the files themselves are – like any large-scale data entry project – prone to data entry errors on names, addresses, and any other information recorded on the files.

Deadwood introduces inefficiencies. Persons who move and re-register could vote more than once and ineligible persons could vote, though there are but a handful of examples of this illegal activity. Perhaps more important are increased budgetary costs resulting from mailing polling place change notices, voter guides, and permanent absentee ballots to people who cannot or should not receive them. Campaigns, political parties, and polling firms waste valuable resources contacting phantom people who cannot vote.

Data entry errors have the potential to introduce similar budgetary inefficiencies as deadwood when resources are used to contact registered voters who cannot be contacted because of errors in their name or address. Additionally, eligible registered voters are not efficiently served by their election administration system when attempts to contact them fail. Voters with registration record errors – through no fault of their own – may be subject to challenges to their voting eligibility because their identifying information does not match voter registration records. Provisional ballots provide a failsafe means of voting, but require further resources to validate a voter's eligibility. When data are in

error, false positive or negative matches may result when election administrators match voter registration records against other databases, such as post office change of address requests, drivers license databases, and lists of felons or deceased persons. In a few cases, allegations of fraudulent voting have resulted from poor matching techniques.

Measuring Voter Registration List Accuracy

There are many techniques to determine the accuracy of any data, though two seem most applicable here: internal examination of these data and comparison of these data with external data.

Internally, these data can be checked to verify that records have valid entries. My work with and analysis of voter registration files reveals that records may have missing or clearly erroneous entries. For example, birthdates that indicate a voter traveled from the future to vote or incorrect addresses, such as those missing a zip code or apartment numbers. The error source may not be obvious: the information may be incorrect on a registration form or it may have been incorrectly keyed into the electronic database. Still, validation at the time of data entry, such as verifying birthdates and matching addresses against known correct lists provided by the post office, can flag for further inspection potentially incorrect data. (Data on voter registration files are so notoriously bad or incomplete that parties and campaigns often contract with marketing and credit firms to match their consumer databases against the voter registration files to fill in missing and clean erroneous data.)

Such validation provides a potential Democracy Index measure, the percentage of a jurisdiction's voter registration records with missing or clearly erroneous data.

Another method to determine the accuracy of voter registration lists is to compare them with external data. Theoretically, the number of registered voters should not exceed a jurisdiction's population of eligible citizens. Yet, a jurisdiction with a high percentage of registered eligible citizens may be indicative of either a well-functioning registration regime that registers all eligible voters or a dysfunctional system with a large number of ineligible persons (deadwood) on the registration files.

In reality, the eligible population is difficult to construct. The decennial census of the population is incomplete and numbers released mid-decade are *estimates* that are inevitably adjusted when a new census is conducted. Population estimates do not account well for temporary residents, such a students and military personnel. Mid-decade estimates of a jurisdiction's non-citizen population are unavailable, and may be constructed by projecting the last decennial census forward. Publicly released felon population reports do not locate felons within local jurisdictions nor do they track well their recidivism, migration, and death rates. (No reliable statistics on the small number of voter-ineligible mentally incompetent are available.)

If we could construct a reliable estimate of the percentage of citizens (not eligible) registered to vote, this measure may be compared to survey data. The Current Population Survey (CPS), a large monthly survey used to generate important economic indicators

such as state unemployment rates, asks a small number of voting-related questions in a November of an election year, including if a person is registered to vote. The CPS may be used to generate a state-level estimate of the percentage of citizens registered to vote. A caution is that survey estimates are prone to statistical and non-statistical survey measurement error.

These measures – estimates of the percentage of eligible citizens registered to vote and a comparison of this percentage with Current Population Survey estimates – are thus limited in their usefulness in the inclusion in the Democracy Index. They may be of greater use by election administrators to identify jurisdictions that may require further investigation into the accuracy of their registration rolls.

There are measures that are indirectly related to the accuracy of voter registration files: purges, transfers, and additions to the voter registration files.

Voter registration records are removed by a process known as purging. Purging may occur through procedures outlined in federal and state code related to the failure to participate in two federal elections and non-response or undeliverable mail sent by election administrators, or matching of voter registration lists against post office change of address requests, drivers license change of address, and felon and deceased lists (see provisions in The National Voter Registration Act §1973gg-6). (There is a high hurdle for removal: The Help America Vote Act Sec. 303(a)(2)(B)(ii) requires that a purging process must ensure only "voters not registered to vote or who are not eligible to vote are removed.")

Voter registration records of registered voters who change residences may be moved with the voter through a process known as a transfer. Some states have automatic transfer procedures for registered voters who apply for a change of address through post office or drivers license agencies. Other states permit registered voters to transfer their registration to their new polling place on Election Day.

The percent of voter registration records purged and the percent of registration transfers among all registered voters may be negatively related to levels of registration deadwood and the number of provisional ballot requests. A caveat is that excessive purging or inappropriate automatic transfers may be lead to inaccuracies.

New voter registrations are additions to the registration lists. By federal law, mail-in applications whose registration is rejected must be sent a rejection notice (see provisions in The National Voter Registration Act §1973gg-6). The percent of rejected additions may provide clues to the accuracy of voter registration lists.

Finally, the number of provisional ballots cast and counted as a percentage of voters or the number of records on the voter registration file may serve as a measure of the accuracy of voter registration records. Provisional ballots are generally understood to be a failsafe option for a voter to cast a ballot when a person's registration record erroneously does not appear on a registration file.

There are two cautions here. First, there are multiple reasons why a provisional ballot may be cast (depending on the jurisdiction): it may be an error in a registration records, the person may not be truly eligible to vote, and the provisional ballot may serve as a registration transfer. Secondly, there are conditions other an eligible voter's record not appearing on the voter registration file that lead to rejection of a provisional ballot, such as where the person voted (for some jurisdictions it is the jurisdiction as a whole and in others it is the correct precinct) and for some jurisdictions a provisional ballot may only be used a true refuge of last resort if an error in a registration record cannot be first resolved otherwise.

Summary

Accurate voter registration lists are relevant to the proper functioning of democratic elections in two ways:

- Customer Service: Voters are ensured that they receive important election information from election administrators and campaigns. Voters are not inadvertently subjected extraordinary voting procedures due to inaccurate registration records.
- Cost of Elections: Election administration and campaigning costs are reduced when election material is delivered only to correct persons on voter registration lists.

The following measures may be considered as indicators of voter registration list accuracy for use in the Democracy Index

- Percent of voter registration records with missing or clearly identifiable erroneous data. This is the most accurate measure of the internal accuracy of registration lists, but cannot address registration deadwood directly.
- Percent eligible citizen population with a voter registration record (and related: a comparison of this measure to a similar estimate available on the Current Population Survey). This measure of registration deadwood is limited in two ways. First, it simultaneously measures inaccuracy and how well the registration system is working, with both related to higher percentages. Secondly, population and survey data are not entirely accurate. These measures may have greater use for election administrators to identify potentially problematic jurisdictions.
- Percent voter registration records with purges, transfers, and additions. Higher levels of these measures may serve as indirect measures of accuracy, with the caveat that excessive purging or inappropriate automatic transfers may be lead to inaccuracies.
- Provisional ballots cast or counted. Since there are multiple reasons why provisional ballots are cast and counted, these measures cannot serve as a direct measure of voter registration accuracy, but may have use for election administrators to identify potentially problematic jurisdictions.

"Democracy Index" Conference – Moritz College of Law, Ohio State University
Sept. 28-29, 2007

"Mini-Memo" on Voter Registration, especially "Ability of Citizens to Verify Registration Status"—plus Other Notes

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Being registered to vote is the admission ticket to participation in the central mechanism of democracy, elections (except in North Dakota). Effective facilitation of citizen registration is then, fundamental to state government performance in election administration; it's also a prime gateway to choice-making by "We the people" on candidates, parties, and policy directions. This includes timely and effective processing of new registrations, as well as readily available and user-friendly means for citizens to verify their registration status. For election integrity, ensuring the accuracy of the statewide voter registration data base, now mandated by HAVA, is also vital. Finally, the number of provisional ballots that are rejected because the voter was not registered should be assessed. There are other related issues that also must be considered, however, some of which I turn to first.

First, forgive me for a question on the conference title: I wonder about using the title "Democracy Index" to apply to rather narrow election administration procedures (it might be a bit misleading for media and public). The need to avoid partisan political debates and to be as objective and precise as possible, thus enabling general acceptance and applicability, is laudable, of course. But let us not forget what the term "*democracy"* means." Thus, the percentage of the public registered and turning out to vote—and what affects those totals—are important to at least keep in the background of our considerations. (Since I've just spent weeks drafting a much more broadly conceived "State of Our Democracy Report" for Minnesota Secretary of State Ritchie, I'm very attuned to a broader view of assessment of what's involved in the full realization of democracy in America.)

For *this* discussion, I would just add one factual point stemming from state policy and election administration: Those seven states that have Election Day Registration (EDR—Iowa has adopted it for 2008) averaged voter turnouts over 13% higher than non-EDR states; in 2006, EDR states averaged 48.7% while non-EDR states averaged 38.2%. (Data from United States Election Project, George Mason University.) Of course, other factors are involved in the higher turnouts in those states, but Election Day Registration itself clearly makes a significant difference; in Minnesota, nearly 550,000 people registered on election day in 2006, just over 20% of all voters. I should also note that Minnesota, as an original Election Day Registration state, does not use provisional ballots; thus, rejection of provisional ballots by unregistered votes is not an issue in our state. New EDR state Iowa is not exempt from use of provisional ballots, which will be interesting to watch.... The head of the Election Division in Minnesota's Office of Secretary of State says that there are so few people rejected in our state's Election Day Registration, given the range of voter ID allowed, that there is no productive comparison with rejection of provisional ballots due to voters not being registered.

Voter Registration Outreach Somewhere in the Conference messages there was an invitation to consider subjects not specified on the official list. I raise such an issue here—a broader subject, although it is more of a challenge to establish precise measures for it: How much is being done in the way of citizen outreach and public information for voter

registration? As the Carter-Baker Commission on Federal Election Reform said, "By assuring uniformity to both voter registration and voter identification, *and by having states play an active role in registering as many qualified citizens as possible*, access to elections and ballot integrity will both be enhanced" (emphasis added, p.9).

Ideally, these outreach efforts should involve direct activities by the state and local election offices, as well as efforts to reach citizens via the news media, Internet/Web, and other communication and organizational means.

Beyond the general public, particular segments are of special concern. Two examples are college students, especially regarding whether they can register and vote where their college is located (and overcoming resistance of some local officials to do so[1]), and ex-felons. Regarding the latter, due to media reports, different laws in various states*, and some political communications and activities, many ex-felons are unaware of their voting rights or are under the false impression that their voting rights are permanently voided. Where there is a significant number of citizens with a primary language other than English, outreach in that language would also be an issue. Surely, a "*Democracy* Index" should include consideration of how substantial and proactive are efforts to reach all those who are eligible to vote to get them registered.

<u>Measures for voter registration outreach</u>:

1. Are details of eligibility, ID for, and access to registration clearly and fully spelled out on the web site of the Secretary of State/state election chief; and is that information in a prominent, easily found place on the site? Is that also the case on county web sites? (Example: Nothing relating to voters and elections appears on the home page of the web site of Minnesota's Ramsey County (St. Paul and capital area). The visitor must guess that, among a number of optional categories, "County Government" should be clicked on, and then read down 12 items on the list, no. 6 being "Elections" and no. 12 at the bottom being "Voting and Elections," which link to the same page(?!).)
2. Are registration requirements and sites for registration available in other *languages* in states where a significant number of citizens need it? The Voting Right Act sets the threshold on this at more than 10,000 "in the jurisdiction" or "more than 5% of all voting age citizens"—although the Act applies only to Spanish speakers, "Asian-Americans, Alaskan Natives and American Indians." The Minnesota Secretary of State's web site provides that information in English, Hmong, Spanish, Somali, Russian, and Vietnamese, although the population numbers do not reach Voting Rights Act levels.
3. What state and local budget allocations are devoted, in whole or in part, to information and active voter outreach for registration? This is not easy to discern, in many cases. In Minnesota's Office of Secretary of State, there is no distinct line item for voter information and outreach; it is, in effect, a small piece of the communication director's role, publications, the Office booth and Secretary's appearance at the State Fair and other events, in the citizen questions and complaints capacity in the Voting and Election Information section of the Web site, along with a last-week-of-the-election phone bank to take questions and complaints, etc. The counties do not appear to have any significant budget allocations for voter information and outreach either. (Minnesota has a $200,000 HAVA allocation for outreach and information specifically for handicapped voters, especially focused on the availability and use of machines like the autoMARK for helping the handicapped vote more independently.)
4. What informational outreach programs does each state have specifically targeted at college students and ex-felons? In the latter case, the obvious approach would

be a program coordinated between the state election office and the corrections authorities for getting that information to prisoners upon release. Does each state have such a program and how thoroughly is it administered?

It should be noted that it is not only state and local government that should be assessed and held accountable for these special categories of outreach. As the New York Times editorially noted in fall 2004:

> College and university administrators also bear some of the blame. Under [1998 amendments to] the Higher Education Act, colleges… receiving federal funds must make a good-faith effort to distribute voter registration forms to every student, and to make those forms widely available on campus. But a new study by Harvard University's Institute of Politics and the Chronicle of Higher Education found that fewer than 17 percent of schools are in full compliance, and one-third are not even making minimal efforts.[2]

Specifically, colleges are to get voter registration forms at least 120 days before the local registration deadline and distribute them to students enrolled in all degree or certificate programs. The study used a survey of college officials asking whether they obtained registration forms and actively and fully distributed them, or whether they simply made them available in various places on campus, or had taken no real action. Colleges were also asked whether other groups had made voter registration drives on campus. (I tried via e-mail and phone to get the full Institute of Politics report, including the survey instrument, but haven't gotten a response yet. I'll try to directly connect with David King, study director, to get the instrument before the conference.) A number of those schools in minimal or no compliance said their budgets were tight and they didn't have the resources to fully follow through. (Stunningly, some college administrators said it wasn't the college's responsibility to encourage voting and civic engagement.) The survey also found that some college officials "contended that state election boards had failed to provide them with a sufficient number of voter registration forms in a timely fashion." Indeed, "some state election officials, including those in Wisconsin, have told colleges that government agencies do not have the money to provide campuses with voter registration forms for every student." This pushes the issue back to the legislature and governor for adequate budget provisions, though what the Secretary of State has asked for would also have to be looked at as well (but see below for a question on this). The study also found problems with some local election officials in their response to registration efforts: "Some town clerks complained… that they lack the resources to process the flood of forms" (as in 2004 election, with all the registration drives). One such official told the New Voters Project, "These people you have working our there are causing major headaches…. Remember our budgets have been cut. Stop this madness."[3]

For present purposes then, to what extent are state—and local— election offices working with colleges in their states to fully administer the Higher Education Act requirements?

Measures:

1. Are there specific procedures in the state election offices for a) contacting all colleges in the state to notify them of the requirements of the law and to get the number of registration forms needed? And b) are there procedures and budget provisions for printing and sending those forms to every college in the state? Since there are not likely to be line-items for such functions, surveys of state election division chiefs and respective administration officers (on the budget) would be required. There is always the possibility of some officials trying to fudge the story on their performance, but if the questions require specification of procedures and numbers on actual production and transmission of forms,

this is probably as good as we can get. (Minnesota law says colleges "may request registration forms from the Secretary of State's Office." Election Division principals say they always have an ample supply of registration cards; the head of the division and another staff person were highly dubious of claims by other states that their budgets didn't allow for adequate stock of registration cards, noting that nice ones cost $22 a thousand. The bad news for Minnesota is that there is no procedure for active outreach to colleges on this, nor is there any effort at notification of the requirements of both federal and state law. Secretary Ritchie did, however, recently meet with students and ex-students working for a major group on this and pledged his full support, including discussion of means of coordination with the colleges.)

2. Surveys of state colleges would also be desirable to a) get reports on local election administrators' responses to college student registration efforts (and, for other subjects in this conference, how they treat college student voters…); and b) to get their perspective on state election offices and the efforts at notification, obtaining totals for forms, and what has actually been sent, in how timely a manner.

(*The confusing welter of state laws on felons and voting: In 2 states, felons never lose the right to vote; in 13 states felons lose the vote only while in prison; in 6 states felons lose the vote while in prison and on parole; in 17 states felons lose the vote while in prison and on parole *or probation*; in 10 states felons lose the vote beyond parole or probation for a limited time or for some offenses; and in 2 states felons lose the vote forever.)

<u>The Ability of Citizens to Verify Registration Status</u>: Providing an online check of registration status for citizens is an obvious, readily accessible way to enhance the ability of citizens to verify their status – and to avoid confusion and disappointment on election day. Twenty-three states, the District of Columbia, and 27 counties and cities provide an online citizen check for registration status. (Embarrassingly, Minnesota is not one of them*. Arkansas is ahead of Minnesota? Horrors! But then, that's the operational point of the "Democracy Index.") The home page of the web site of the National Association of Secretaries of State has a link to a page called "NASS Can I Vote?," with a pull-down list of links to those data bases. (*The Minnesota Office of Secretary of State sought legislation in the 2007 legislative session to establish an online voter verification capacity, but it was eliminated in the legislative process—which again demonstrates the need to look beyond election offices to governors and legislators for the full locus of responsibility.)

<u>Measures</u>: Does a state or other jurisdiction have an online capacity for checking registration status, and is there a readily visible place to click on a link for this on the home page, or at least on the first part of a major Voter and Election Information section/page? See the note above in item 1 under Measures for Voter Information Outreach for an example of a county where the voter information is not ideally accessible.

But do people walking along main street or in the mall know of that online means to verify their registration status? It does little practical good if only a small percentage of the public knows of this online function. *Thus, this again raises the issue of citizen/voter outreach.* What efforts are being made to alert citizens to this resource?

We must not forget that there remain a good number of people who do not have regular connection with the Internet; senior citizens, poor people, and minorities are all part of the "Digital Divide." Non-Internet modes of registration verification must also be available.

As in most states, for each newly registered voter, Minnesota sends a Postal Verification Card to the address, and if it is not returned, then it is assumed the citizen's address is verified in the appropriate precinct, and the citizen has been notified of their status. (That, of course, raises the issue of homeless voting….) In Minnesota there is not an easy way for citizens continuing at the same address to verify their registration status;

basically, the only way is to call the county auditor – and if it's near election time, the citizen may have a tough time getting through, given tight budgets and thinned out personnel.

Brief Note on Timely Processing of New Registrations: Minnesota Case In Minnesota, there are three ways officials get registrations. First is the Motor Voter provision where people getting a new driver's license check the "opt-in" box to register to vote. As the head of the Office of Secretary of State's Election Division, Gary Poser, elegantly puts it, the Office gets "the daily dump," the transmission of the electronic record of new registrants from Driver and Vehicle Services, which, with its "county code" for each registrant, is then sent on to the respective County Auditor to process for readying the polling place voter lists. (Meanwhile, it has been electronically placed in the Statewide Voter Registration System (SVRS).) Some states may still transfer paper registration cards, which would certainly be more time-consuming. The second mode is when individual citizens send their own registration card by mail or deliver it over the counter to the county office (sometimes citizens give it to the Secretary of State's Office, which forwards it to the county). The County Auditor then has 10 days to process it and input the name into SVRS. This is generally low volume and there is rarely any time issue. The third way registration cards come in is from candidate, party and group voter drives. In Minnesota they must be received by 21 days before the election. These can come in by the thousands, and there tend to be a large number at the last minute; it can be a great strain on election official resources to process these in time for the election (double shifts in those last 3 weeks are common). (For Election Day registrants, since they are at the polling place, it is not an issue for that election; election officials have 6 weeks to input those registrations thereafter.)

State Voter Lists and "Interoperability" For registration of new residents who moved from another state and otherwise, the Carter-Baker Commission on Federal Election Reform pointed out the need for the computerized state registration lists to be "interoperable" so that citizen moves to a new state can be relatively seamless and list accuracy facilitated. This, however, raises two other matters. First, the computerized data bases need to have a common "template" for processing the data; the Commission recommended a model similar to that of the Department of Transportation for commercial driver's licenses, which uses a "distributed database"—a collection of the 50 state and Washington, D.C., databases, with each driver having a single license. This is not the current case, however. The second issue is the need (required by HAVA) for a "unique identifier" number for each voter. Most states use the driver's license number; some states use the Social Security number. The Commission recommends using the Social Security number throughout the states; but that or other uniform national ID card and corresponding number raise concerns about identity theft and Big Brother threats. The Commission suggests ways to maintain the security of voters' private numbers, but critics see their claims as optimistic. The head of the Minnesota Election Division says the federal government has ruled out using Social Security numbers for that purpose (original state users are grandfathered in). The state election chief says that, if we move to a uniform system, the best method would be for original computer-generated unique voter registration numbers for all registered voters. This is a significant issue; but it isn't so much a state-to-state comparison as a national question, unless we seek to measure how readily each state's system lends itself to such interoperability.

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[1] For a good summation, see "Barriers to Student Voting," New York Times editorial, Sept. 28, 2004, p. A26. (This was part of the Times' "Making Votes Count" series of editorials.)
[2] Ibid; Chronicle of Higher Education, Sept. 17, 2004, Vol.51, No.4, pp.A1-A34.
[3] Ibid, Chronicle of Higher Education

Mini Memo: Timely processing of Registration

Karin MacDonald

The ways by which citizens may register to vote vary among the states, and sometimes even among jurisdictions within the states, as do the dates by which registration has to occur in order to be eligible to cast a ballot in an upcoming election. Below, is a general discussion of how these variations create problems that may hinder the timely processing of registrations, along with the types problems that arise when registrations are not processed in a timely manner, for the general voter population and specific sub-sets. I then address the points the 'democracy index planning team' outlined in their memo of 6/15/07.

The differences in ways to register start inconspicuously with differences in registration forms. In California, for example, the Secretary of State provides one registration form that can be used to register to vote in any California county. Each county also has its own registration form, and there is variation in the information that the registrant is asked to provide (for example, some counties ask for country of birth). In order to keep track of their registered voters, the registration affidavit has a number preprinted on the form, which becomes the number assigned to the voter in the county of residence. The numbering schemes become complex when statewide voter registration databases are constructed due to duplications, which is why counties often add their county code to the affidavit number. When registered voters move from one county to another, their registration number is often changed by necessity because the affidavit number is already in use, and thus their voter history may be lost, which can be a great problem in polarized voting analyses for voting rights act claims. Similarly, tracking voters that registered with a registration form from a different county (such as after a naturalization ceremony in San Francisco to which residents from multiple counties were assigned) becomes difficult as San Francisco (in this example) has to forward their form to the registrant's county of residence, where it will then be assigned a new affidavit number prior to the voter being properly registered. When this situation arises close to an election, we find this memo's first instance of problems with timely processing of registration forms.

Only one state in the U.S. does not require a voter to register before voting (North Dakota). Seven states allow for "Same-Day" or "Election-Day" registration. Other states have registration deadlines ranging from a few days prior to the election to a few weeks before the election. States that let voters register on Election Day vary in their implementation of this process. For example, some states only process these registrations at the local registrar's office, thus effectively ensuring long lines and a limited number of potential voters who can take advantage of it (because of the distance to the office, having to work, childcare issues, etc.).

Election administrators in states that close their registration books early typically point to the need to keep their rolls accurate, provide their poll workers with complete 'rosters' on election day, and minimize the need for provisional ballots. Registration drives, partisan or non-partisan, mostly sign up new voters immediately prior to the close of registration.

Election administrators may find themselves with hundreds or thousands of registration forms on the last day on which to register, all of which have to be processed for eligibility, and then allocated to the accurate ballot groups and polling places. In states that restrict the number of voters per precinct, this may require a redrawing of precinct lines.

Overseas and military voters (those covered by the Uniformed and Overseas Citizen Absentee Voting Act, or UOCAVA in short) have additional ways to register. One, they may use the Federal Postcard Application form or FPCA. Some states also have special registration forms for voters that are covered by the act. Two, in some states UOCAVA can register via electronic transmission methods like fax or email, or they can do so via telephone. However, the registration options may not be available *throughout* a given state, and may indeed be dependent on the availability of a fax machine or a computer with online access at the local election administrator's office. Depending on the respective state's laws allowing for electronic transmission of voting materials, the issue of timing in terms of processing registrations for UOCAVA voters is crucial, as the delivery of regular postal mail can be significantly delayed in some countries, and ballots may be stuck in transit for weeks. The same is true for delivery via military mail, and/or delivery to members of the armed forces in the Navy that may be on submarines or ships for weeks at a time, or deployed in remote areas away from military bases.

UOCAVA voters also have to deal with confusing and changing laws that determine whether and for how long they are registered to vote. Often, they only find out that they are not registered when their ballot does not arrive and they then inquire. At that point, it is often too late to register them unless their jurisdiction accepts registration forms and signatures electronically, and allows ballots to be transmitted either by fax or email.

When UOCAVA voters return to the U.S. and want to vote at the polling place for the first time upon their return, they often have to confront one or a combination of the following issues: their absentee ballot has already been sent overseas, their registration has lapsed, poll workers do not know how to process them, and the voter may be eligible for a different ballot than the one he/she was eligible for overseas. In the best case scenario, the voter might be able to go to the local election administrator's office to straighten out the registration issue in person, however, on Election Day there are often long lines and the potential for disenfranchisement is high.

Aside from dealing with 'special populations' like UOCAVA voters, there are the obvious problems with timely registration processing: those that arise from a lack of multi-agency cooperation in moving registration forms regularly to the local election administrator's office. The National Voter Registration Act (NVRA) requires that states designate various agencies to offer its clients the opportunity to register to vote. Among those agencies are the state's Department of Motor Vehicles (DMV) and offices that provide public assistance. There are many well documented and anecdotal implementation issues that arise from this NVRA requirement. One relates to agency 'mission.' In the example of the Connecticut DMV below, the mission statement reads:

> "The mission of the Connecticut Department of Motor Vehicles is to promote and advance public **Safety**, **Security** and **Service** through the regulation of drivers, their motor vehicles and certain motor vehicle-related businesses."

As a California DMV official stated in a meeting I attended recently: "The DMV is not a voter registration office." The failures to implement policies that are in conflict or not part of an agency's mission have been documented in numerous studies in the field of Public Administration. When top-level administrators do not view mandates as critical, the implementation on the client level will suffer. For example, it is likely that little to no training time is spent on how to deal with voter registration forms or what to do with them once they are returned. While many DMVs as well as public assistance offices have routinized the passing out of voter registration forms to their clients, the breach in implementation often occurs when the client tries to return the form and there is no method by which that form makes its way to the local election administrator's office. In every election, poll workers report that potential voters arrived at their polling place only to find out that they were not registered, despite having filled out forms at the above agencies. Election administrators also report that boxes or sacks of voter registration forms sometimes arrive months after they were filled out; DMV officials have privately recounted stories of finding stacks of voter registration forms somewhere in their department, and none of their staff believed that their job description required them to get these forms to the elections office. There is an obvious disincentive for workers in these agencies to process voter registration forms, as that is a task which creates more work for them and is not critical to their job performance.

Having described the general environment that gives rise to 'timely processing of registration' as a sub-topic for the democracy index, let me address some points that the 'planning team' suggested:

1. Identify ideal or what matters most:

The 'ideal' on this topic is that every eligible voter is able to cast a ballot on Election Day (or prior to Election Day in cases of early voting or absentee voting domestically and from overseas). As discussed above, the major problem is two-fold: one, the in-person voter arrives at the polling place and is informed by poll workers that s/he is not listed in the roster.[1] Two, the absentee or UOCAVA voter does not receive a ballot. In a perfect system, all eligible citizens would by default be registered to vote, and their registration would move with them wherever they go. A better system would have registrations that are automatically updated when a voter moves, through the postal system, the DMV, etc.

2. Figure out what an acceptable standard is:

An acceptable standard is a well-implemented safety-net. This net may be composed of various facets, including same day registration, preferably available in every polling place, and the availability of provisional ballots for cases in which eligibility can not be

[1] The term may vary by jurisdiction, but 'roster' here refers to the list of registered voters that poll workers/election boards have and must use on Election Day.

immediately established. The availability of electronic transmission methods for election materials, including blank or completed registration forms and/or ballots, would be of great benefit to UOCAVA voters.

3. What sort of data would be used to make the measurement; which measure or measures are likely to work; what data are available or could be obtained:

Valid and reliable outcome measures in the field of election administration are notoriously difficult to establish, and this topic is no exception.

Election administrators frequently complain about their ever increasing data reporting tasks. Trying to assess the issues above will require additional data collection work for them, their staff and poll workers and will meet with resistance. Nevertheless, we propose the following set of measures be considered.

One, poll workers would collect data at each polling place about how many people leave without casting a ballot and the reasons for it.

Two, election administrators would compare the date when a registration form was filled out to the date when it arrives at their office. This should not be too difficult if there is a field provided on the data entry screen for the statewide voter registration database. In the process, it should be noted where the voter registration form originated (DMV/signature collector/etc.)

Three, election administrators already have to provide the number of provisional ballots that are counted. The reasons for why provisional ballots were NOT counted should be also be recorded and summarized.

Four, the data collection that is required under HAVA and NVRA should be sufficient for at least a first stab at measurement of the timely processing of UOCAVA voter registrations, because election administrators are supposed to track and report the number of UOCAVA voters in their jurisdiction. However, most jurisdictions are unclear about which voters are covered by the UOCAVA law, and the various registration forms and paths of registration that can be used by UOCAVA voters further confuse data collection issues for this population. Many jurisdictions are currently unable to differentiate between UOCAVA and absentee voters! Furthermore, recent changes in how long UOCAVA voters stay active on the registration rolls before becoming inactive (2 federal election cycles) and thus not receiving ballots automatically, have caused additional confusion and data problems. There needs to be some serious education for election administrators to clarify these issues and train them to properly comply with the law.

4. What strategy could be used to get the data:

One clear option is to require, through legislation or administrative rule-making, that local election offices collect and keep certain sets of data. However, as described in the UOCAVA example above, there are various problems that already exist with current data

collection requirements. In recent research, my colleague Bonnie Glaser and I, spoke with election administrators who had misreported data in federal questionnaires, and we found with some further questioning that we were able to 'extract' the correct data. Rigorous education programs for local election administrators on how to structure data collection and on the importance of reporting of accurate data might prove to be beneficial. Also, it would help to assign an outside party to review regularly reported numbers and follow-up with election agencies on those which are questionable. Finally, and most importantly, a general change in the environment in which election administrators find themselves currently would assist in data collection. Currently election officials are on the defensive (legally and politically) and fear that data collected on their performance will be used against them. A more collaborative environment must be established, in which election chiefs feel less attacked and more willing to work with researchers to solve general problems.

Measuring Provisional Ballots Rejected Because Voters Were Not Registered

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There is enormous variation in provisional voting practices across states.[1] Any attempt to measure and evaluate the performance of state processes for handling provisional ballots must first come to grips with this reality. It is true that the Help America Vote Act of 2002 ("HAVA") requires that voters be given the opportunity to cast provisional ballots in certain circumstances – specifically, where voters appear at their polling place only to find that their names not on the registration list,[2] and where a mail registrant does not provide acceptable identifying information.[3] Nevertheless, the distinct characteristics of each state's election system result in major differences in the purposes for which provisional ballots are used, how many are issued, and how many are counted.

For example, in Ohio, provisional ballots are used for some voters who have moved between election cycles. This undoubtedly contributes to the relatively high percentage of provisional ballots cast in that state and may also explain the high percentage of provisional ballots counted there.[4] Toward the other end of the spectrum is Wisconsin, one of the eight states that now has Election Day Registration ("EDR"). Wisconsin's EDR system eliminates the need to issue a provisional ballot in cases where the voter comes to the polls on Election Day and finds his or her name missing from the registration list. Instead of casting a provisional ballot, as would happen in other states,

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[1]For a more extensive discussion of this variation than is possible here, see Eagleton Institute of Politics & Moritz College of Law, *Report to the U.S. Election Assistance Commission on Best Practices to Improve Provisional Voting Pursuant to the Help America Vote Act of 2002, Public Law 107-252* (June 28, 2006).

[2]42 U.S.C. § 15482(a). States with election-day registration are exempt from this requirement. *Id.*; *see also* 42 U.S.C. § 1973gg-2(b).

[3]42 U.S.C. § 15483(b)(2)(B).

[4]See Kimball W. Brace & Michael P. McDonald, *Final Report of the 2004 Election Day Survey* 6-9, Tab. 6a (2005)(listing percentage of registered voters casting provisional ballots and the percentage or provisional ballots counted in each state).

that voter may simply register at the polls. It should therefore come as no surprise that very few provisional ballots are cast in Wisconsin.[5]

The variations in how different states use provisional ballots counsels caution in any attempt to develop a mechanism for measuring and evaluating states' performance in this area. It would be of little value, for example, to rank states based solely on the percentage of provisional ballots issued or counted. A relatively small number of provisional ballots issued might indicate that the states' registration system is highly reliable, and therefore that provisional ballots are seldom needed. Alternatively, it might result from a states' failure to issue provisional ballots to all those voters who are entitled to receive them under HAVA. By the same token, there might be good reasons for a state counting a relatively small percentage of the provisional ballots cast – particularly where the total *number* of such ballots is relatively low. It might be the case that there are legitimate reasons for not counting some of those ballots, including voters' failure to comply with state registration rules.

To recognize these difficulties is not to say that it is impossible to develop a mechanism for measuring a state's handling of provisional ballots. In fact, the specific subtopic that I have been asked to address – the number of provisional ballots rejected because voters were not registered – may actually be among the easier things to measure. It does, however, require consideration of two questions. First, what does it mean for a voter to be "not registered"? Second, how can we reliably determine the number of provisional ballots rejected for that reason?

The first question is deceptively difficult. One might be inclined to define a voter as being "registered" if and only if his or her name appears on the registration list at his or her polling place. But there are many reasons why voters claiming to be registered might not have their names on the list of the polling place at which they appear, including:

1. *Voter error*. The voter might be lying or might be mistaken about having registered before the election. Alternatively, the voter might have registered but omitted key information (such as his or her address) that resulted in the voter's name being left off the list.

2. *Third-party error*. Groups conducting registration drives prior to elections, such as ACORN and the League of Women Voters, sometimes make mistakes. Those groups may inadvertently fail to submit some of the registration forms collected from would-be voters. Additionally, there have been some reports of registration forms being collected by groups affiliated with one party and not being turned in

[5] *Id.*

because the voters sought to register as members of an opposing party.

3. *NVRA agency error*. Many voters register through motor vehicle agencies or other state offices that are required to offer registration opportunities under the National Voter Registration Act ("NVRA"). These agencies can make mistakes, such as failing to pass all the registration forms they receive to local election officials. Voters who filled out voter registration forms when they moved to a state and got their driver's license may therefore appear at the polls to find their names not on the list.

4. *Election official error*. Another reason that a voter's name might not appear on the list when he or she appears is that there was a mistake on the part of the state or local officals charged with handling registrations. A form might have been received, but never inputted into the voter registration database. Alternatively, there might be data entry errors that result in the voter's name not appearing on the list at the proper precinct.

Should we define a voter as "not registered" in all these circumstances? Only in the first? Or in some combination of the above circumstances? There is of course a normative question within this definitional question. We can probably agree that most if not all voters in the first category ought not have their provisional ballots counted. On the other hand, most would probably believe that voters' provisional ballots should be counted if their names were omitted from the registration list due to a third-party registration group, public agency, or election official error. This in turn raises the question of how diligently election officials should be required to search for a missing registration record, before making a determination whether to count the provisional ballot. Measuring the number of provisional ballots rejected on the ground that voters were "not registered" can be expected to provide an incentive for states to look more diligently before rejecting ballots on this ground.

As a practical matter, it's likely to be difficult if not impossible to ascertain the precise reason why many voters' names didn't appear on the list when they came to vote. It may therefore be necessary to consider voters "not registered" if their names do not appear in the state's registration system, irrespective of the reason.[6] If this broad definition of "not registered" is adopted, it should be recognized that many if not most of those in this category are there through no fault of their own. Though not within my sub-

[6]This would include some but not all of those voters whose names were omitted due to election officials' errors. A data entry error might result in voters' names not appearing on the list where they appear to vote, but still being in the state's registration database. Alternatively, it could result in their names no appearing anywhere in the registration database.

topic assignment, this highlights the need to develop a reliable way of measuring the accuracy of a state voter registration lists.

Once it's ascertained how to define "not registered," we must still develop a reliable way of determining how many provisional ballots were rejected for that reason. According to the final report on the 2004 Election Day Survey, voters being "not registered" was the most often mentioned reason for provisional ballots being rejected.[7] That report does not break down the precise number of provisional ballots rejected for this and other reasons. The 2006 Election Day Survey did ask states to provide the total number of provisional ballots rejected for various reasons both statewide and by county/local jurisdiction,[8] though results have yet to be released.

It would be a relatively simple matter to calculate both the number and percentage of provisional ballots rejected on the ground that the voter was not registered based on states' survey responses. But there are at least two significant problems with using this as a measurement tool.

The first problem is that states may not provide accurate or complete information. This was a serious problem with the 2004 survey, one that I need not discuss in detail here since the social scientists at the conference are undoubtedly much more familiar with it than I am. What does bear mentioning is that the inaccuracy of self-reported data can be expected to increase, if election officials know that they will be ranked or otherwise evaluated based upon their responses. For example, if election officials know that they'll get an unfavorable ranking for rejecting a large number of provisional ballots on the ground that voters are unregistered, then they'll have a strong incentive to provide an artificially low number. This is likely to be an issue for many subjects of a Democracy Index, one that I simply note here without trying to solve it. It does seem clear that some sort of monetary incentives and/or penalties, along with an auditing system, will probably be necessary to induce states to provide accurate and complete data.

The second problem with ranking states on this basis is that it is sometimes appropriate for a state to reject a provisional ballot on the ground that the voter is not registered. The best example is a voter in the first category mentioned above, one who is not registered due to his or her own mistake. Even with the best possible system for maintaining lists and verifying provisional ballots, there will be some voters whose

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[7]Brace & McDonald, at 6-5.

[8]The 2006 survey instrument appears to have been removed from the EAC website where it once appeared: http://www.eac.gov/eav_survey.asp, though a cached version is available through Google. Results have yet to be released.

ballots are properly rejected on the ground that they failed to register in accordance with state law.

That does not mean that it would be pointless to consider the number or percentage of provisional ballots rejected for this reason. A large number of rejected provisionals might indicate the need for improvements in state or local electin officials' system for processing registration forms. It might indicate the need to improve the state DMV's handling of registration forms, or the monitoring of third-party registration. Alternatively, it might indicate the need to better educate voters on the requirements for voter registration. But if a high percentage of provisional ballots are rejected on the ground that voters aren't registered, it does suggest that something is amiss.

The percentage of provisionals rejected on this ground is likely to be more meaningful the larger the *number* of provisional ballots cast. To take the examples mentioned at the outset, it would be very troubling if 50% of the 157,714 provisional ballots cast in Ohio's 2004 general election had been rejected on the ground that the voter was not registered.[9] By contrast, we would probably not be very troubled if 50% of the provisional ballots cast in Wisconsin's 2004 general election were rejected on this ground – given that only 374 provisional ballots were cast statewide. In fact, it might make sense to exclude all EDR states from any ranking of the percentage of provisional ballots rejected on the ground that voters weren't registered, since these states are likely to have minuscule numbers of provisional voters.

To summarize, I think it would be useful to measure the number of provisional ballots rejected on the ground that the voter is not registered, despite the challenges inherent in developing a reliable mechanism for doing so. Those challenges include: 1) the difficulty of defining voters "not registered," 2) the unreliability of self-reported data, and 3) the imprecision of a raw number or percentage, which might obscure the reasons (some of them legitimate) why provisional ballots are not counted. With these caveats, I'm inclined to believe that a survey-based system of measuring the percentage or provisional ballots rejected on the ground that the voter was not registered has some value, so long as EDR states (and perhaps others with small numbers or provisional ballots) are omitted.

[9]In reality, a much smaller percentage (21.6%) of Ohio's provisional ballots were not counted, and not all of them because the voter was found not registered.

To: Participants, Democracy Index Conference
From: Robert M. Stein, Greg Vonnahme, Rice University
Re: Poll place effects on voter turnout
Date: September 5, 2007

Introduction

Efforts to increase voter turnout and/or the representativeness of the electorate abound in the U.S. To date these efforts have met with modest if not disappointing success (Berinsky 2005; Hansen 2000). In this memo we outline an alternative proposal for increasing voter turnout and representation that focuses on polling place location and operations. Based on recent research on election day vote centers we identify attributes of polling places that effect voter turnout, especially among historically unengaged and under represented segments of the electorate.

Effects of other election reforms

Previous research has identified electoral rules as one of four general factors that influence voter turnout. (Leighley 1995). Electoral reforms directed at increasing voter participation have centered on simplifying voter registration and increasing opportunities to vote (e.g., voting by mail and in-person early voting). The rationale underlying early voting and related electoral reforms (e.g., Motor Voter and voting by mail) has been the belief that providing more opportunities to vote (i.e., the number of days, hours or sites at which to vote) increases voter participation.

Reducing the number of days prior to an election in which voters can register to vote and allowing individuals to register to vote when renewing their driver's licenses or at the polls on Election Day has increased voter registration (Wolfinger and Rosenstone 1980; Squire, Wolfinger and Glass, 1987). But studies of the direct effect of voter registration and balloting reforms on voter turnout suggest minimal responses on the part of the electorate. National legislation (i.e., National Voter Registration Act of 1993) to enable individuals to register to vote when they renew or obtain a driver's license has had only a modest impact on voter turnout (Knack 1995; Rhine 1996). Liberalized voting by mail (Berinsky, Burns and Traugott 2001) and in-person early voting (Stein and Garcia-Monet 1997; Stein 1998) were also found to have an insignificant or marginal effect on increasing the likelihood an individual will vote.

Empirical evidence regarding who is affected by contemporary electoral reforms is either mixed or weak. Nagler (1991: 1402) concludes that restrictive registration laws do not deter poorly-educated individuals from registering any more than the highly-educated. This implies that liberalizing these laws may increase registration overall, but will not equalize participation across classes. Conclusions regarding election reforms beyond registration are similar. Stein (1998) reports that resource-poor voters did not benefit from the adoption of in-person early voting, while Berinsky et al., (2001) find that voting by mail has little effect on the "resource-poor" (2001:178). Stein (1998) also reports that early voters appear to be more partisan, ideological, interested in politics, and *disproportionately likely to have voted in the past*. Simply put, electoral reforms have only been used by those who otherwise would have been most likely to vote without them. Similar findings have been reported for relaxed absentee voting (Karp and Banducci 2000; Oliver 1996: Berinsky 2005).

The modest impact electoral reforms have had on voter participation remains partially unexplained. Teixeira (1992) and Berinsky (2005) suggest an important obstacle to voter participation is voter motivation and interest in the political process. "This suggests that attempts to reconnect American to politics should focus especially on ways to encourage psychological involvement in politics and promote a sense that the government is responsive to the ordinary citizen (1992:156)." Berinsky concludes that electoral reforms that make the act of voting easier help to "retain engaged voters" rather than "stimulating the unengaged" voter (2005:413).

The cumulative evidence to date suggests that electoral reforms have simply made voting more convenient for engaged and frequent voters while doing little to enhance the likelihood that infrequent votes will ballot on or before Election Day. We offer a slightly different perspective on the cost of voting that might provide a less daunting and potentially efficacious institutional remedy for increasing voter turnout, especially among infrequent voters.

Effects of polling locations

Scholars have also examined the effects of polling locations on electoral participation. One recent area of research is the effects of distance from one's polling location on voter turnout. The general argument from existing research is that individuals' probability of turning out to vote should decrease as the polling location is located farther away, but the empirical findings have not been consistent across studies. One study (Haspel and Knotts 2005) shows the voter turnout tends to decrease as individuals are farther from their polling location, but that this effect is mediated by whether the individual has access to a car. This study uses data from Atlanta, however, and it is not clear how widespread individuals' access to a car is, particularly since the 2005 American Community Survey shows that over 91% of respondents have one or more cars in their household, and the percentage might be higher for registered voters. Another study (Gimpel and Schuknecht 2003) suggests a non-linear relationship between distance and turnout, so that individuals that are close, and much farther away are not affected, while individuals that are moderately far from their polling location are less likely to vote. They conjecture that the non-linear relationship might be related to travel times, so that the actual effect is the time spent traveling rather than the distance, and a moderate commute from a suburb might take longer in traffic than a longer rural commute with open roads. A third (Brady and McNulty 2002) study of precinct consolidations in Los Angeles finds that individuals' likelihood of turning out declines by 0.5% with every mile from their polling location, but does not find other mediating or non-linear relationships.

While these studies might be suggestive of possible effects of vote centers, they are also limited in several regards. One is that they do not consider vote centers as the main explanatory variable of interest, but rather consider distance from a precinct-based polling locations, which may not generalize to vote center counties. There is also not a clear set of findings from the existing research, so the effects of distance might vary by individual characteristics or geographic context for precinct counties alone, without considering other possible differential effects with vote centers. Previous research that explicitly examines Election Day vote centers has found that they might increase individuals' likelihood of turning out to vote by between three and eight percent, and that the effect was stronger for infrequent voters (Stein and Vonnahme 2007).

Convenience and voter turnout

The convenience of voting has long been studied by researchers, but until recently, the effects of convenience on the probability that an individual will vote has not been theoretically well-understood. The problem with earlier theoretical models of voter turnout is that they consistently under-predict observed levels of voter turnout. Recent refinements to these earlier models that incorporate a learning process have been shown to better match observed levels of voter turnout in US elections. There is some disagreement as to the specific learning mechanism that voters might use, but these recent models all suggest that voters condition their future voting behavior on their previous experiences. According to these models if an individual finds that voting is simple and convenient in one election, she is more likely to vote in the following election (Bendor, Diermeier, and Ting 2003; Fowler 2006; Gerber, Green, and Shachar 2003). Some research also suggests that negative experiences can lead individuals to be less likely to vote in subsequent elections (Bendor, Diermeier, and Ting 2003; Fowler 2006).

The existing theoretical models of voter turnout are important to our project in at least two ways. The first is that it provides an existing theoretical basis for linking the convenience of voting to voter turnout. While the connection between convenience and voting seems intuitive and in many contexts is left implicit, this work helps to formally establish the link from which our study can build. The second implication of the existing theoretical work is that even after the reform is implemented its full effect might not be immediately realized. The recency of the reform (circa 2003) does not provide a source of longitudinal data to really examine the possible longer-term effects of the reform, but it might be an important topic for future research once there is a better understanding of the short-term effects.

Convenience of voting

The theoretical models discussed above are important to our study to establish a formal link between the costs of voting and participation.[1] While the costs of voting are an intuitive concept and they have a clear role in the formal theoretical models of turnout, it is not necessarily clear how the costs of voting relate to observable variables such as time, distance, and location. Most studies seem to treat the costs of voting as a combination of the time it takes to vote, distance traveled, informational requirements, voter ID / registration restrictions, or others, but there does not seem to be a clear consensus about how to measure the costs of voting from existing research.

In this study, we offer a slightly different way of conceptualizing convenience than has previously been considered. While previous studies of voter turnout have focused on the time it takes to vote as a primary cost of voting, going to the polls is not necessarily the only thing that individuals will do on Election Day. That is, there is an opportunity cost to voting such that going to the polls leaves individuals will less time for work, lunch, shopping, or recreation. While voting can be thought of a rivalrous with other activities, voting can also be made more or less complementary, so that all modes of voting will not be equally costly.[2] In this way, there might be alternative ways of administering elections that do not eliminate the time costs entirely, but rather makes the act of voting more complementary rather than competing with other demands. Election Day vote centers, by allowing individuals to vote at any location throughout the county, might be more complementary with peoples' daily routines than exclusive precinct locations. If true, the convenience of voting might not directly correspond to the distance between where people live and their polling site. For example, a person might prefer to vote at a polling location that is two miles from their house but on the way to work rather than a polling site that is only a mile away from their house but in the opposite direction. That voters are likely to be doing other things on Election Day raises the possibility that voting might be made more complementary with those other activities, by locating polling places that are near to workplaces, schools, shopping areas, or major transportation routes so that they are more accessible to individuals throughout the day.

Vote centers and convenience

According to our argument, vote centers should be negatively related to the costs of voting, which in turn will lead individuals to be more likely to vote. Thought of this way, vote centers have an indirect effect, operating through convenience, on levels of voter turnout. This section focuses on establishing the relationship between vote centers and convenience.

Conceptually, we argue that there are two features of vote centers that separate them from precinct-based polling locations. The first characteristic is dichotomous, and captures whether the polling sites are open to all voters in the county or if they are exclusive to a certain precinct (or combined precincts). We argue that voter centers can be distinguished from precinct sites, as vote centers are open to all voters in the county, whereas voters are assigned to one particular site with precinct locations. This first characteristic seems consistent with the current implementation of Election Day vote centers, in that there have been no restrictions for any individual on where they were eligible to vote on Election Day.

Openness

Open polling locations might be related to the costs of voting in several ways. While vote centers typically reduce the number of polling sites county-wide they increase the number of sites available to individual voters. Whereas precinct-based voting assigns each voter to a single polling site on election day, vote centers allow individuals to vote at any polling site in the county. By allowing individuals to vote at multiple locations, they can choose the site that is most convenient for them, and might increase their probability of turning out to vote. This might be particularly important for voters that commute longer distances, as residentially based polling locations might only be accessible in the mornings or evenings, while other polling locations might be nearer to their destination and more accessible throughout the day.

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[1] There is some variation in terminology across studies of voter participation. Theoretical work typically discusses the "costs" of voting, whereas other research discusses "convenience". In this proposal, we simply treat costs as the inverse of convenience, which seems consistent with the extant research.

[2] The 2005 *Current Population Survey* asked a sample of U.S. citizens why they did not vote in the 2004 Presidential Election. The modal response (21.1%) was 'too busy, conflicting schedule.'

This might have at least three different effects. First, by affording voters a choice about where they can vote, it allows them to vote at a time and place that is most convenient for them. Second, Election day vote centers it might also better distribute voter arrival times throughout Election Day. That is, precinct polling sites might be more accessible to individuals at morning and evening peak times. As more people go to the polls at peak times, the load increases on the polling sites which can lead to longer lines and more time that voters must spend waiting to vote. If vote centers are more accessible throughout the day they should reduce the load on polling sites during morning and evening peak times, which might reduce lines and the time that voters spend waiting in line.

Open polling locations might also lower the informational costs of voting, as individuals do not need to have specific information as to their voting district and the polling place that has been established for their particular voting district. Rather, individuals will only need to know which sites are available for county-wide voting. Open polling locations might therefore tend to increase voter turnout by making polling locations more convenient and accessible on Election Day, and also reduce informational costs as individuals no longer need to know what particular site was chosen for their voting district, but rather can vote at any polling location throughout the county.

Centralization

The second characteristic that we argue helps to distinguish vote centers from precinct sites is centralization. This refers to the characteristic that vote centers tend to be larger and fewer in number than precinct-sites. While openness has a binary quality (vote centers are open to all voters in a county, whereas precinct sites are the only permissible location for residents within a designated geography), centralization can occur to a greater or lesser extent depending on how vote centers are implemented. Existing legislation seems to commonly set a minimum number of sites of one vote center per 10,000 population in the county. But this is only a minimum standard, and the actual number of sites will likely depend on factors such as the anticipated turnout and size and density of the county population. While there is more variation in the extent to which polling sites may be centralized, we might be able to identify minimum and maximum boundaries, so that the most decentralized system would be similar to precinct sites and the most centralized system would be similar to having exactly one site for each 10,000 residents of the county. We are likely to actually observe vote center counties that fall somewhere between these two extremes.

Centralization might also have a positive impact on voter turnout as it might increase the convenience of voting through larger and more visible sites. Larger polling sites might also be more accessible from major transportation routes and have more available parking, and also reduce informational costs by being located in larger, more visible locations. In addition to location effects, centralization might also make voting more convenient by improving voters' experiences with poll workers. Moving from a larger network of smaller sites to a smaller network of larger sites will likely involve placing more poll workers, on average, at a vote center than at a precinct location.[3] By having a larger number of poll workers at each site, the poll workers will be more able to specialize in specific tasks such as assisting voters with questions, showing them how to operate voting machines, or checking machines to see that they are operating properly. With greater worker specialization, poll workers are expected to perform their tasks better and more reliably than if they performed a wider range of tasks, which might allow the vote center to more efficiently process voters, and improve service to voters.

Applications to Precinct based voting

All of the attributes of centralization are applicable to the operation of precinct-based polling places. Moreover, there is good reason to expect that these attributes might enhance turnout among the less engaged electorate. Three specific hypotheses are considered for testing below.

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[3] The number of workers might increase for polling sites, but vote centers also involve fewer polling sites, so that the number of workers might decrease at the county-level. This might also have the effect of allowing location election officials to select more qualified poll workers, as their demand for poll workers decreases.

Hypothesis 1: Precincts more centrally located to where people work, shop, attend school or recreate should lead to higher turnout.

Hypothesis 2: Precincts which are more accessible to vehicular traffic should lead to higher turnout.

Hypothesis 3: Precincts with a greater number of voting machines per registered voter should lead to high turnout.

Hypothesis 4(1)-(3): Precincts with more centrally located to work, shopping, etc. with higher ratios of machines to registered voters and accessible to vehicular traffic should lead to:

1. positive voter evaluations
2. greater voter confidence in the integrity of the election process
3. lower costs of administered elections

Research Design

Evaluating these hypotheses requires we collect a diverse set of data. Testing the effects of precinct attributes on turnout requires that we have reliable and valid information about whether, when and how individuals voted. Furthermore, we need information about rival explanations of voter participation. These data include demographics (age, income, education, gender) known to be related to voter turnout as well as psychological variables including partisan affiliation, interest in politics, political trust and efficacy. These latter data are normally obtained from interviews with voters as they leave the voting place (i.e., exit polls) or shortly after the election via telephone. We know from previous work that voters over report their participation in elections. A remedy for invalid survey generated information on voting is to use the archival voting histories of registered voters provided by county election officials. These data include valid measures of voting history, age, gender and partisan affiliation (in the case of Colorado). They omit, however, significant demographic information and all psychological information about the voter. Similarly post-election surveys conducted days and sometimes weeks after the election are unable to accurately capture the voter's subjective evaluation of the voting experience. Here exit polls, conducted as the voter leaves the polling place increase the accuracy of our measures of voter satisfaction with their polling place and voting experience. We have planned this study using different sources of data so that we might combine the strengths of the different approaches in a way that will provide more reliable estimates of the effects of Election Day vote centers.

Our first source of data to evaluate the above hypotheses will be collected from election records. In this part of our data collection, we plan to gather information on institutional variables about the precincts themselves. We plan to gather information on a national sample of precincts about residential addresses for each site, the type of building, number of parking spaces, access to major roadways, number of voting machines, poll workers, number of voters, and how the sites are connected to the central voter registration lists. These data will be matched with a sample of voting histories for individual voters in each precinct. Voter addresses will be geocoded to measure their and proximity to voting precincts.

Casting Ballots

Prepared for Democracy Index Conference, Columbus Ohio, Sept 28-29, 2007
Caroline Tolbert, University of Iowa

Goals

Casting ballots is at the heart of a democracy, and it is at this individual level that citizens interface with their government. The fifty American states vary dramatically in the laws governing voting, including whether ballots can be cast before or only on Election-Day, whether they can be cast by mail or only at polling places, the hours of the day available to vote, the equipment used to cast votes, and more. Voting is by far the most frequent political activity experienced by most Americas and because of this, citizen experiences at the polls matter for evaluations of government and political trust.

The integrity of America's election system rests on a fair and impartial system for casting ballots and without such a system we do not have democratic governance. A number of goals affect this stage of the election process. A system for casting ballots must be efficient (which can be operationalized by reducing residual votes, reducing time spent in line to vote, convenience voting reforms, etc.). A system for casting ballots should facilitate the opportunity for participation in elections. Such a system should be transparent in that voters understand where to vote, how to use voting machine, how to read the ballot, who to ask for help, etc. And the system for casting ballots should not lead to systematic bias, such as increased barriers for racial or ethnic minorities, the poor, the low-educated, the elderly or young. Lessons learned from extensive scholarship on turnout in American elections over the past thirty years can inform us about how to study casting ballots.

The Larger Puzzle

Voter turnout in American elections is low compared to other advanced industrialized nations and the electorate is skewed toward those with higher socioeconomic status. Most election reform efforts in the U.S. focus on changing state rules to make voter registration and voting easier (convenience voting). Berinsky's survey (2005) of research on the effects of voting reforms suggests that eliminating barriers to voting largely increases turnout of people demographically quite similar to those who already vote—higher educated, wealthier, and older (See Fitzgerald 2005). The literature largely suggests that these convenience reforms fail to increase turnout or alter the demographic composition of state electorates. Why?

Guiding Principles

Our understanding of what causes low voter turnout from the published literature is largely based on aggregate data and fails to explore how state and county laws governing elections affect individual voting decisions. The literature generally focuses on overall turnout rather than turnout of disadvantaged subgroups. These two principles, 1) studying individual level experiences casting ballots or the effects of state laws on individual attitudes and behavior, and 2) emphasizing the experiences of disadvantaged voters (racial and ethnic minorities, the young, low-educated, low-income) are the guiding principals of this mini-memo on casting ballots. In summary, in studying casting ballots we should:

1. Study individual level experiences, taking into account state and polling place context
2. Study the overall or general population

3. Study disadvantaged subgroups of the population
4. Confirming to the guidelines of the Democracy Index, this memo focuses on output measures, rather than inputs and objective, quantifiable measures rather than subjective measures.

Leveraging State Experimentation

Our understanding of what causes low voter turnout or shapes experiences of voters at polling places often ignores the state context in which individuals reside. The American states offer a natural laboratory (a "laboratory of democracy"), with significant variation in the rules, institutions, and procedures governing elections, as well as levels of electoral competition within states that may engage and mobilize citizens. Ignoring state contexts in which individual level political behavior occurs and attitudes are formed will likely lead to incorrect inferences about the problem. A forthcoming study finds states with Election-Day registration, for example, have significantly higher turnout rates over a twenty-five year period, but the reform has an even greater effect in boosting turnout when combined with competitive governor's races in midterm elections (Cain, Donovan and Tolbert forthcoming). The stimulation of contested races may mobilize turnout among non-registered voters, who take advantage of Election-Day registration in lower information elections. But lacking individual-level data, we don't know who is mobilized to turnout. This example illustrates the importance of situating individuals within their state contexts to understand the problems voters face when casting ballots, or individual turnout decisions.

Better Ways to Study Elections: Using Existing Data

Studying election reform in the American states means taking state geographic context seriously. We cannot study political attitudes and behavior in isolation of the larger political context in which an individual resides. It is thus imperative that we have large and representative samples of respondents from each of the 50 states to merge with state-level variables. Standard surveys (with only 1000 or 2000 respondents, including the widely used American National Election Study) do not sample randomly within states (only within regions), do not include all 50 states (usually only 40-44 states, omitting small states) and include very small samples from less populous states. These data are unsuitable for studying how state contextual environments affect individual political behavior and attitudes. The Voting and Elections Supplement conducted in November of the Current Population Survey (CPS) provides large and robust samples of respondents from each of the fifty states (100,000 respondents), making ideal analyses possible. The CPS is conducted every two years by the U.S. Census Bureau with between 1,000 to 6,000 respondents from all fifty states, including small states such as Hawaii, Alaska and Wyoming. These data have been *underutilized* in our research, as they provide the best source of existing data to explore questions of state contextual effects on individual level voting. The CPS does not include geographic identifiers for congressional district, county or city and thus only state aggregate variables can be merged with the individual survey data. This is a serious limitation.

With these multilevel data (individual and aggregate state), one can test whether individuals residing in states with convenience voting reforms (e.g. voting by mail, early voting, no-excuse absentee voting, etc.) have a higher probability of voting at the individual-level, and also whether these state election reforms shape the composition of the electorate, mobilizing disadvantaged subgroups (young, low-educated, poor and racial and ethnic minorities).

Better Ways to Study Elections: New Data Sources

Because the CPS is not an opinion sample, it does not provide information about individual political trust or partisanship or many other quantities of interest that are important. Large sample post-election surveys comparable to the CPS could significantly improve our understanding of how voters feel about the process of casting ballots and attitudinal predictors of voting. New innovations in online polling using census data to adjust the samples may increase our ability to conduct these very large surveys with robust samples from within states. Knowledge Networks and Polimetrix are private polling firms providing these data to varying degrees, for a cost.

Another approach is targeting resources to conduct large statewide surveys. For example, my colleague, David Redlawsk, and I will conduct a large sample post 2008 election survey of Iowa voters to understand their experiences with the new Election Day registration (EDR) law, as well as the demographic and partisan attributes of those using EDR in Iowa. We are currently fielding pre-election surveys asking about awareness of Iowa's new EDR law. Similar random digit post-election telephone surveys conducted in states with new election laws, such as Colorado's Vote Centers or Oregon's mail voting, would be valuable in understanding the demographic and partisan composition of those taking advantage of these laws.

Better Ways to Study Elections: Request a CPS Supplement on Election Administration?

The Current Population Surveys are a valuable model for neutral/factual language. *In March 2003 the CPS did a special supplement on Computers and Technology. If the CPS could be convinced to do a special supplement on Election Administration we would gain much.*

Possible Nationwide Post-Election Survey Questions (Exit Polls can be less reliable)
Individual Experiences

1. Did you cast a mail ballot (absentee ballot or mail ballot)?
    a. If yes, approximately how many days before the election did you vote?
    b. If yes, how long did it take you to vote? Did you vote from home or work?
    c. It yes, did you have questions when completing the ballot that could not be answered?
2. Did you vote before the election?
    a. Did you cast a ballot at your neighborhood polling place or a Vote Center? [On Vote Centers see work by Eric Juenke, University of Colorado]
    b. If yes, approximately how many days before the election did you vote?
    c. If yes, how long did it take you to vote? Did you vote from home or work?
3. Did you vote on Election Day at a polling place?
    a. If yes, have you voted at this polling place before or was this a new location?
    b. If yes, did you go to more than one polling place to find your correct precinct?
    c. If yes, did you vote in the morning or the afternoon?
4. If ballot was cast at a polling place, was identification required to vote?
    a. If yes, what type of identification was required (seven point scale from none to government photo identification—see work by Alvarez and Katz]
    b. If yes, did you experience problems locating this identification?
    c. If yes, was the identification you provided questioned or rejected by a poll worker?
5. Were there problems locating your name as a registered voter?
    a. If yes, what type? [open ended]
    b. If yes, were you given a provisional ballot?

6. What type of voting machine did you use to cast a ballot at a polling place?
    a. Experiences using computerized voting machines…..[See work by Paul Hernsen at the University of Maryland and Lonna Atkeson and Kyle Saunders]
7. Did you wait in line to vote,?
    a. If yes, approximately how long did you wait in line?
    b. Did you wait outside or inside the building? [inside, outside, both].
    c. If you waited outside the building, was there inclement weather?
8. Approximately how long did it take you to cast your ballot? [five minute intervals, such as less than five minutes, between five and ten minutes, etc.]
    a. Was the design of the ballot easy to understand? [See work by David Kimball on ballot design. Scale of ease of use from very easy to very difficult.]
9. Were you offered assistance by a poll worker in using a voting machine?
    a. If yes, was the poll worker friendly and helpful?
    b. If yes, could the poll worker answer your questions?

    [See work by Thad Hall, Quin Monson, and Kelly Patterson on poll worker training]
10. Did the voting machine you were using malfunction while in use?
    a. If so, please explain [open ended]
11. Were the hours of operation of your polling place sufficient?
    a. If no, what hours would you have preferred? [increments of one hour]
12. Did you work (full or part time job) on Election-Day?
13. Did you drive to the polling place or use another form of transportation?
14. Approximately how long did it take you to commute to your polling place?
15. If driving, was parking available at your polling place?
    a. Approximately how long did it take you to park your car?
    b. Approximately how long did it take to walk from the car to the polling place?
16. Do you have a visual/reading disability?
    a. If yes, was an auditory voting machine made available?
17. Do you have a physical disability that requires use of a wheel chair?
    a. If yes, did the polling place have wheel chair accessible access?
18. Do you need assistance reading the ballot in the English language?
    a. Questions on bilingual assistance….
19. After casting your ballot, were you given a paper record that you had voted successfully or some type of a receipt?
20. How confident are you that your vote was accurately counted? Please respond on a scale of 0 to 100, with 0 meaning no confidence, 100 indicating 100% confident and 50 indicating neutral. [Use of feeling thermometers for subjective questions about confidence in government have been shown to be more accurate than forced likhart scales]
21. Where there any problems at your polling place that you would like to share? [open ended]

Systematic Bias versus Efficiency

Responses to these questions should be analyzed using multivariate statistics (controlling for age, education, income, gender, race/ethnicity) to determine if there are any systematic biases. If minorities (Latinos, Asians, blacks), the young, poor or low-educated are significantly more likely to experience problems at the polls (such as required to show photo-ID, etc) than the

election system may not be functioning properly. Avoiding systematic bias is more critical to the functioning of a healthy democracy than efficiency (ie, an election system that produces fewer residual ballots, or has shorter lines) (Cain, Donovan and Tolbert forthcoming).

Objective Measures: Collected at Polling Place or State-level Laws. These data could be merged with large sample survey data to understand effects on individual attitudes.

Polling Place Measures

1. Votes cast per hour per voting machine collected at polling place by machine.
2. Approximate number of voters waiting in line measured at the top of the hour measured each hour the polling is open by ???.
3. Residual ballot rates [See work by the MIT/Caltech Voting Project].
4. Number of provisions ballots casts.
5. Number of uncounted ballots because of balloting errors (voters at wrong polling place, absentee ballots lost in mail or disqualified because of processing problems)

State Level Measures

6. State allows early voting.
   [See work by Paul Gronke]
7. State has permanent absentee voting. State has no-excuse absentee voting.
   [See work by Karp and Banducci]
8. State has all mail voting (Oregon, Washington, etc.)
   [See work by Southwell, Karp and Banducci, Berinsky, Burns and Traugott]
9. State has Vote Centers, allowing individuals to vote at any location before the election located in shopping malls. [See work by Eric Juenke, University of Colorado]
10. State does not require photo identification to vote.
    [See work by R. Michael Alvarez and Johnathan Katz. State laws range on a seven-point scale from no identification required to picture government photo identification]
11. State has an Election-Day holiday or public school closures.
12. State has computerized voter registration records.
13. State does not purge voter rolls after a certain number of years of inactive use.
14. State allows one to register less than 20 days before the election.
    [See work by Wolfinger and Rosenstone and Ben Highton]
15. State has Election-Day registration. [See Highton 1997; Fitzgerald 2005; Knack and White 2000; Brians and Grofman 2001]
16. State has longer polling place hours.
17. State does not have mental competency rules.

An Easier Problem: Sample for CPS Question on Reasons for Not Voting

Future CPS surveys should ask of all NON-VOTERS, not just non-voting registered voters, the reasons why they did not vote in the election. Because the questions on reasons for not voting are only asked of *registered non-voters*, it forces scholars to select on registered voters. In the below table, the 88,000 respondents who are "out of the universe" are either registered voters or non-registered non-voters. The sample (registered non-voters) asked the reasons for non-voting questions in the CPS are those who have been interested in past elections, and cost of voting are much less (they are registered) but choose to sit out in this election. Only a very small proportion of Americans are asked this question. Yet it is the *unregistered, non voters*

who we care about the most. Questions about reasons for not voting are the only opinion questions in the CPS/attitudes in voter supplement. All others are factual questions.

Among this sample, in the 2004 CPS, the modal response was “too busy, conflicting work or school schedules.” followed by “illness or disability.” In third place was “other” followed by “not interested, felt my vote wouldn’t count.”

In the 2004 CPS, the distribution of responses was:

main reason (you/name) did not vote?	Freq.	Percent	Cum.
no answer	2	0.00	0.00
refusal	25	0.03	0.03
don't know	166	0.17	0.20
out of universe	88,146	92.39	92.59
illness or disability (own or family's)	1,208	1.27	93.86
out of town or away from home	727	0.76	94.62
forgot to vote (or send in absentee bal	227	0.24	94.86
not interested, felt my vote wouldn't m	850	0.89	95.75
too busy, conflicting work or school sc	1,542	1.62	97.36
transportation problems	178	0.19	97.55
didn't like candidates or campaign issu	767	0.80	98.35
registration problems (i.e. didn't rece	480	0.50	98.86
bad weather conditions	33	0.03	98.89
inconvenient hours, polling place or ho	203	0.21	99.10
other	854	0.90	100.00
Total	95,408	100.00	

For a comparison, in the 2000 CPS the distribution of responses was:

vote-main reason did not vote	Freq.	Percent	Cum.
no response	1	0.00	0.00
refused	32	0.04	0.04
don't know	156	0.19	0.23
not in universe	74,271	90.68	90.91
illness or disability (own or family's)	1,212	1.48	92.39
out of town or away from home	829	1.01	93.40
forgot to vote (or send in absentee bal	306	0.37	93.78
not interested, felt my vote wouldn't m	1,001	1.22	95.00
too busy, conflicting work or school sc	1,629	1.99	96.99
transportation problems	185	0.23	97.21
didn't like candidates or campaign issu	649	0.79	98.01
registration problems	508	0.62	98.63
bad weather conditions	112	0.14	98.76
inconvenient polling place or hours or	198	0.24	99.01
other	814	0.99	100.00
Total	81,903	100.00	

Again, the top three reasons offered were too busy, illness or disability, or not interested in the election. It could be that those not interested in the election resided in non-swing states or in highly uncompetitive congressional districts (See McDonald and Samples 2006; Mann and Cain 2005; Donovan and Tolbert 2007). The 74,000 respondents “not in the universe” were again the registered voters and unregistered non-voters.

Those who we care about the most (unregistered non-voters) were not asked this question. The Pew Research Center included this question on a 2006 post-election survey but the samples were much smaller than the CPS. If this question were asked of all non-voters

(registered and non-registered), we could analyze whether there are biases in who is not-interested or too busy to vote, and whether they are shaped by individual race/ethnicity, age, gender, income or education, or state contextual factors.

Conclusion and Future Opportunities

Low political participation is considered a primary failure of American politics. The American states offer a laboratory for empirically evaluating the effects of electoral reforms by providing significant variation in the rules and procedures governing elections. The findings of research on casting ballots can help us learn what election laws and election administration practices are effective in boosting overall voter turnout, especially mobilizing participation by disadvantaged groups. The goal is to bring social science research to bear on public policy and diagnose the problem with American's election system.

DEMOCRACY INDEX: SOURCES OF UNCOUNTED BALLOTS

Conny McCormack
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Los Angeles County, California

The purpose of this mini-memo is to describe sources of voted ballots that are not included in the vote tabulation, identify the reasons why and determine what data to seek when attempting to quantify sources of uncounted ballots. "Lost votes" occur due a myriad of problems encountered in the vote-casting process some of which are more readily measurable than others. For example, it is more difficult, if not impossible, to accurately quantify potential vote loss based on a precinct(s) not opening on time, running out of ballots at a precinct(s) or an absentee ballot(s) that did not get delivered (i.e. lost in the mail or otherwise misplaced). Often only anecdotal evidence and/or allegations that cannot be substantiated constitute what is available in these categories.

In order to be more precise and measurable, this paper focuses on the reasons why there are a number of uncounted ballots in two different scenarios. The first involves an assessment of reasons and categories regarding those absentee ballots that are not counted. These are the sub-set of ballots that are voted prior to election day and then mailed to the elections office but, for various reasons, are not subsequently counted. The second involves a comparable assessment regarding uncounted provisional ballots. Provisional ballots are cast on election day when a voter's eligibility cannot immediately be determined and are segregated from other voted ballots usually by placing each provisional ballot into a separate, designated envelope.

Case study: this paper uses statistics from Los Angeles County, California from the November 2004 Presidential Election as a snapshot to illustrate and quantify the numbers of uncounted ballots in each of the two above-referenced categories.

Absentee/Mail Ballots

Over the past few years, the number of voters nationwide who are now casting their ballots by mail has increased exponentially. This trend can largely be attributed to the fact that many states have changed their laws to eliminate restrictions and to allow excuse-free or universal absentee voting by mail. Some states require absentee/mail ballots to be received in the election official's office no later than election day. Other states permit voters to place their ballots in the mail on election day, i.e. such states validate mail ballots received after election day as long as the ballot envelope contains a postmark denoting election day or earlier.

For the November 2004 Presidential Election in Los Angeles County there were 3,972,738 registered voters and a voter turnout of 79.1% of registered voters. Of the 3,085,582 total ballots tabulated for that election, 701,693 were cast via the absentee/mail process (22.74% voted absentee). However, thousands more absentee ballots were voted and returned to the elections office but were not counted. The reasons why some voted absentee/mail ballots were not included in the count are listed below together with the number in each category (in parenthesis): 1) received after election day[1] (6,728); 2) returned by the post office as undeliverable (3,346); 3) no signature on the absentee ballot envelope (1,221); 4) void ballot, i.e. a voter who moved or a non-eligible person (887); 5) blank ballot returned with marking on the outside envelope indicating the person is deceased (535); 6) signature on the absentee ballot envelope does not match the signature on the voter's registration form[2] (409); 7) no ballot or two ballots enclosed in one absentee envelope[3] (98); and 8) absentee ballot turned in at a polling place by an unauthorized individual[4] (20).

Provisional Ballots

Although the federal Help America Vote Act of 2002 (HAVA) requires all states to provide a provisional ballot to any person who affirms s/he is legally registered to vote but whose name is not listed on the voting list and verification is not immediately possible, state laws vary widely regarding the disposition of such provisional ballots. For example, in order for the provisional ballot to count in some states, the voter must appear at his/her designated voting precinct to vote. Other states allow a provisional ballot cast outside of the voter's home precinct to be counted for those contests on which the registered voter would have been eligible to vote had s/he appeared at the assigned precinct. California law falls into the latter category[5].

For the November 2004 Presidential Election in Los Angeles County, 2,383,889 of the 3,085,582 total ballots counted were cast on election day at the 4,604 designated voting precincts. For that election, a record-high 204,578 voters cast provisional ballots of which 166,894 were eligible to be counted (81.5% validation rate). Of those counted, 41,737 provisional ballots were cast in the wrong precinct and had to be "remade" prior to tabulation (22,345 involved ballots containing some electoral contests/districts which differed from the voter's eligible districts while 19,392 involved the exact electoral contests/districts as the voter would have encountered in his/her home precinct).

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[1] In California, election day is the legal deadline for receipt of voted absentee ballots.
[2] California law requires the absentee voter to sign the return ballot envelope and requires the local election official to compare that signature with the signature on the voter registration form.
[3] Sometimes a husband and wife return their ballots in a single envelope without two signatures.
[4] State law requires an absentee ballot to be returned by an authorized/designated person, such as a family member.
[5] A short history of how provisional voting laws have changed in California over the past 24 years is found at Attachment 1.

There were 37,684 uncounted provisional ballots for the above-referenced election. The reasons and statistics for key categories include: 1) no record of the person registering to vote or incomplete information was provided on the voter registration form (30,669); 2) out of county residence address (2,392); 3) no signature on provisional ballot envelope (845); 4) already voted absentee ballot[6] (720); 5) signature on provisional ballot envelope does not match voter registration signature on file[7] (151); 6) voter registered after deadline (254); 7) voter became a citizen after the deadline (222); 8) blank/unvoted ballot in provisional envelope (1,350); 9) and miscellaneous other categories (1,081).

Interpretation of Data

With regard to provisional voting, it is important to guard against over-simplification when attempting to interpret this data. It would be misleading to equate a high number/percentage of provisional ballots as a simple indication that the voter registration database is inaccurate or out of date or that poll worker training was inadequate or ineffective when another or very different variables could be playing a pivotal part. For example, because the October 2003 Governor's Recall Election in California presented every voter statewide with the same balloting information and because there was significant consolidation of voting precincts in Los Angeles County for that election, some political campaigns began publicizing a "vote anywhere" message.

It has been my experience that when voters hear a well-publicized message that they find appealing, they listen to it and continue that behavior. Subsequently, and perhaps consequently, provisional voting increased dramatically in the 2004 and 2006 statewide elections especially with regard to voting out of the assigned precinct. The pattern of increasing provisional voting behavior continued for these elections even though precincts were not consolidated for the 2004 and 2006 statewide elections and different electoral contests appeared on voters' ballots depending upon the political districts in which they resided. Many voters cast their ballots outside of their home precincts via the provisional balloting process perhaps primarily because another voting location was more convenient such as closer to their job or for any number of other reasons.

Conclusion

Further research and analysis would be valuable to determine the number and types of uncounted ballots in various electoral jurisdictions and comparing those statistics among jurisdictions within the same state or among states with similar laws versus states with divergent laws. Such research, including with regard to

[6] Typically occurs when an absentee voter mails his/her voted ballot back to elections office very close to election day and is concerned it may not be received by election day.

[7] California law was amended in 2001 to require that the same procedures used to compare signatures for absentee ballots must be used to compare signatures on the provisional ballot envelopes. This process requires matching the voters' signatures on the voter registration file with the signatures on the provisional envelopes in order for the ballots to count.

absentee/mail ballot and provisional ballot instructions and procedures[8], could be instrumental in electoral jurisdictions providing voters with user-friendly materials and/or in formulating best practices and/or advancing legislative proposals. For example, placing a notification on the absentee ballot return envelope to advise that voted absentee ballots must be received by the elections office no later than election day in order to be counted constitutes a final reminder to voters prior to signing and sealing their absentee ballot envelopes. Research could measure the number and percentage of absentee ballots returned after the deadline among jurisdictions within a state that provided this information on the absentee ballot return envelope compared with jurisdictions that only included that message as part of the voting instructions but not on the absentee ballot return envelope. Similarly, developing and sharing best practices regarding envelope design and wording of provisional ballot voting instructions could have a direct correlation to error and could lead to increasing the number of provisional ballots that are able to be counted.

[8] Design and wording of absentee and provisional ballot envelopes in Los Angeles County is found at Attachment 2 and 3, respectively.

HISTORY OF PROVISIONAL VOTING LAWS IN CALIFORNIA

1983 ENACTMENT OF SPECIAL CHALLENGED BALLOT VOTING

In 1983, **Assembly Bill 2092/Chacon (Chapter 629)** effective January 1, 1984, was enacted into law. This new law authorized the use of a special challenged ballot voting procedure which:

- Allowed a voter claiming to be properly registered and whose qualification to vote could not be immediately established at the polls, to vote a special challenged ballot.
- Required that the ballot be sealed in a special challenged ballot envelope and placed in a sealed container reserved for that purpose.
- Required that special challenged ballots would not be included in any semiofficial or official canvass, except upon 1) the clerk's establishing the voter's right to vote prior to completion of the canvass or by superior court order.
- Required that the ballots be in the form of the absentee ballot and special ballot envelopes be similar to the absentee ballot envelopes. Also required that the special challenged ballot envelopes be printed in a different color than the absentee ballot envelopes.
- Excluded voters who were issued an absentee ballot and returned to their polling place on Election Day but were unable to surrender their un-voted absentee ballot.
- Provided a sunset date of January 1, 1990.

1985 TERM "SPECIAL CHALLENGED" CHANGED TO "PROVISIONAL"

Senate Bill 821/McCorquodale (Chapter 1582) , effective January 1, 1986 changed the term "special challenged" to "provisional" ballot and allowed the use of envelopes marked "special challenged ballot" until supply was exhausted.

1986 AMENDMENTS TO PROVISIONAL VOTING PROCEDURES

Senate Bill 1851/McCorquodale (Chapter 528), effective January 1, 1987 enacted the following amendments:

- Deleted requirement that the provisional ballot be in the form of the absentee ballot.
- Deleted provision that required a separate container for provisional ballots and required, instead, that the sealed provisional ballots be deposited in the ballot box.
- Made provisional voting applicable to absent voters who return to their polling place on Election Day but are unable to surrender their un-voted ballot.
- Deleted the January 1, 1990 sunset date.

1995 AMENDMENTS TO PROVISIONAL VOTING PROCEDURES

There were two bills that amended provisional voting procedures effective January 1, 1996:

- **Assembly Bill 1713/McPherson (Chapter 919)** was enacted to allow a voter who has moved from one address to another within the same county and has not reregistered at the new address, to vote a provisional ballot, upon showing proof of current residence, at the polling place at which he or she is entitled to vote based on current residence. The voter will be reregistered at that precinct for future elections.
- **Assembly Bill 1711/McPherson (Chapter 451)** provided that the elections official shall not reject the provisional ballot of a voter who cast their ballot outside of their assigned precinct provided that the ballot cast by the voter contained only candidates and measures on which the voter would have been entitled to vote in their assigned precinct.

2000 AMENDMENTS TO PROVISIONAL VOTING PROCEDURES

Senate Bill 414/Knight (Chapter 260) effective January 1, 2001 was enacted to require that the procedures used in the comparison of signatures for absentee ballots be used in the comparison of signatures on each provisional ballot envelope.

2003 AMENDMENTS TO PROVISONAL VOTING PROCEDURES

Senate Bill 613 (Chapter 809), effective January 1, 2004 enacted the following amendments:

- Requires the elections official to provide written instructions to the voter regarding the process of casting the provisional ballot.
- Requires the voter to execute, in the presence of an elections official, a written affirmation stating that the voter is eligible to vote and is registered in the county where the voter desires to vote.
- Provides that a provisional ballot shall not be rejected because the voter cast the ballot at a polling place outside of his or her assigned precinct. Requires the elections official to count the entire ballot if it contained the candidates and measures on which the voter would have been entitled to vote in his/her assigned precinct and only those candidates and measures on which the voter would have been entitled to vote if the ballot also contained candidates and measures on which the voter was not entitled to vote.
- Requires the Secretary of State to establish a free access system so the voter can check whether their ballot was counted.
- Deletes requirement that a registered voter, who has moved within the county and failed to reregister, must show proof of current residence when voting at a polling place at which he or she is entitled to vote based on the current residence

NOTE: Senate Bill 1547 (Chapter 920, 1994 Stats.) and Assembly Bill 3082 (Chapter 183, 2004 Stats.) made technical non-substantive amendments to provisional voting procedures.

WARNING - VOTING MORE THAN ONCE IN THE SAME ELECTION IS A FELONY AND CONSTITUTES A CRIME IN THE STATE OF CALIFORNIA

Attachment 2

PLACE FIRST-CLASS POSTAGE HERE

OFFICIAL ABSENTEE BALLOTING MATERIAL

(To be opened only by Election Canvassing Board)

LOS ANGELES COUNTY
REGISTRAR-RECORDER/COUNTY CLERK
PO BOX 30960
LOS ANGELES CA 90030-0960

YOUR VOTED BALLOT MUST BE IN THIS OFFICE BY 8:00 P.M. ON ELECTION DAY TO COUNT. POSTMARK NOT ACCEPTABLE

YOU MAY RETURN YOUR VOTED BALLOT EITHER...

- BY MAIL - Recommend mailing early and no later than the Friday before election day.
- IN PERSON - On or before election day.

Ballot may be hand delivered to any polling place in L.A. County on election day or to the Registrar - Recorder/County Clerk's Office, 12400 Imperial Hwy Norwalk.

IF YOU MADE A MISTAKE IN VOTING YOUR BALLOT, CALL (562) 466-1323 FOR A REPLACEMENT.

VOTER: READ STATEMENT, SIGN AND DATE IN BOX BELOW

I am a resident of and a voter in the precinct, and the person whose name appears on the envelope. I have not applied nor intend to apply for an absent voter ballot from any other jurisdiction for the same election. I declare under penalty of perjury that the foregoing declarations are, to the best of my knowledge and belief, true and correct.

COMPLETE THIS BOX IF BALLOT IS RETURNED BY AN AUTHORIZED PERSON

I hereby affirm that I am ill or disabled and that I designate

_____ X _____
Print Name of Person Returning Ballot — Signature of Person Returning Ballot

who is my spouse, child, parent, grandparent, grandchild, brother, sister or household member to return my ballot.

X _____
Voter: Sign Here to Authorize

Print Residence Address and City Where Registered (Mailing/PO Box not acceptable)

Voter: You must sign in your own handwriting for this ballot to count. DO NOT PRINT. (Power of Attorney Not Acceptable)

X _____

VOTER SIGN ON LINE ABOVE Date: _____

If voter is unable to sign, s/he may make a mark witnessed by one person.

WITNESS: SIGN HERE _____

THIS BOX FOR RR/CC OFFICIAL USE ONLY

☐ COUNT ☐ NO COUNT

SERIAL# REASON: _____

OFFICIAL CANVASS

CLERK 1: _____

CLERK 2: _____

RR OPERATOR

DATA ENTRY SECTION

VOTER I.D. #: _____

AV? YES ☐ NO ☐ PARTY (PRIMARY ONLY) _____

BALLOT GROUP _____ / _____ (REGISTERED / VOTED)

PRECINCT # (D/P ONLY) _____

UPDATED BY _____ DATE: _____

FOR THE POLLWORKER

***COMPLETE* THIS SECTION**

Precinct # _____

Serial # _____

Prov. List Line # _____ Party Ballot Issued _____ (Primary only)

Check a Box:

☐ Name not in Roster

☐ Absentee voter - no ballot to surrender

☐ New Voter - no proof of identification

Comments: _____

Pollworker's Name: _____

LOS ANGELES COUNTY REGISTRAR-RECORDER/COUNTY CLERK

PROVISIONAL BALLOT ENVELOPE

(VOTING TWICE IS A FELONY)

REV 3-03

FOR THE VOTER *COMPLETE AND SIGN*

Attachment 3

First Name _____ M.I. _____ Last Name _____

Current Residence Address _____ City _____ State _____ Zip _____

Mailing Address (If different from above) _____ City _____ State _____ Zip _____

If Moved Since Last Registration:

Previous Residence Address _____ City _____ State _____ Zip _____

Birth Date: __ __ / __ __ / __ __ __ __ U.S. State or Foreign Country of Birth: _____

I am a citizen of the United State: ☐ Yes ☐ No

I am 18 or older: ☐ Yes ☐ No

Calif. Driver's License or I.D. # or last 4 digits of SS #: _____

Registered Political Party: _____

Daytime Phone # __ __ __-__ __ __-__ __ __ __ (Optional)

Voter Declaration:

I declare under penalty of purjury that I reside at the address listed above; I have not previously voted in this election either by Absentee Ballot or at any other polling place.

I declare I am a U.S. citizen, a resident of California, not in prison or on parole for the conviction of a felony, and at least 18 years of age at the time of the election.

X _____ _____

Voter Signs Here Date

Easy Steps for the Pollworker to Follow:

1. Voter fills out right portion of envelope
2. Pollworker fills out left portion of envelope
3. Print voter's name in the Provisional List
4. Issue a ballot and pink secrecy sleeve
5. Insert VOTED ballot inside this envelope
6. Pollworker fills out receipt and gives to voter
7. Drop envelope into ballot box

Counting Ballots: Tabulation Errors Caused by Technological, Human or Administrative Mistakes

By
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704-687-2987

In considering counting ballots, we should strive for the standard of the intent of the voters being translated accurately into election outcomes. The voter makes his decision, casts his vote (in some manner) and the vote is counted and certified.[2] In some cases, ballots for particular races are also recounted and/or audited. It is possible that technological, human (voter) and administrative mistakes can affect the process of tabulating and counting ballots. Thus, this memo analyzes errors that may result from voting equipment, errors that may result from equipment and ballot usability, and administrative errors (both potentially intentional and unintentional), and both on the part of the pollworker and the local election administrator(s).

Right now, many scholars are analyzing overvotes, undervotes or residual votes at the county or precinct level to understand such goals as equipment accuracy and usability. Alternatively, scholars may use experimental methods, where hypothetical voters are asked to vote a particular ballot to determine usability and/or accuracy. Any way of analyzing this process must take into account pre-election day voting (both absentee by mail and early in person voting) as well as election day voting in the precinct.

However, first, we must discuss the ways in which ballots are both cast and tabulated. Voting equipment may result in errors and voters may make errors using certain equipment. Between the 2000 and 2006 election, Kimball and Kropf (2007) found that two-thirds of

[1] The work presented here emanates to my joint research with David C. Kimball (University of Missouri-St.Louis). I accord him special thanks.
[2] The use of the passive voice here is intentional for now to account for the ambiguity of any tabulation errors being caused by technological, human or administrative mistakes.

voters—nearly 60 million voters are voting on new equipment. Table 1 provides a short description of each type of voting technology and summary data on the prevalence of each voting method in the 2000, 2002, 2004 and 2006 elections.[3],[4]

There are two factors to consider: first, full-face direct recording electronic equipment may reduce residual votes at the top of the ballot, but the full-face format is difficult for voters for ballot propositions, which are typically presented at the end of the ballot. Second, DRE equipment has been controversial for security reasons, which should be fully examined. Usability of various types of DRE equipment, as well as whether it has a voter-verified paper trail should be considered as well. It is not entirely clear what the "best" equipment is for races at both the bottom and top of the ballot.

Vote tabulating equipment should correctly register the vote count. Moreover, when we recount or audit the votes, as many states and jurisdictions do in the case of very close elections, we should be able to replicate the results. In other words, in a recount, the results returned the first time around should be the same as the results received the second time around. Part of evaluation of the status of "democracy" should focus on the audit/recounting procedures used by local jurisdictions and/or the states.

Considering that some jurisdictions are moving to optical scan equipment, graphic design of those ballots may affect ability of a voter to cast a vote as intended. In a recent study, Kimball and Kropf collected and coded these hand-counted paper and optical scan ballots used in 250 counties from five states with contests for governor during the 2002 general election. Our pilot

[3] Some counties have precinct-count optical scan balloting but do not activate the error correction feature when scanning the ballots. These counties are coded as central-count systems.

[4] In some counties, particularly in the Northeastern part of the country and Wisconsin, not all ballots are cast using the same technology. In those cases, we code the voting technology as the equipment used by at least 75% of the voters. If no single method was used by at least 75% of the voters, the county's voting technology is coded as a "mixed" system. Most of the counties with mixed systems are in states where elections are administered by municipalities or townships.

study uncovered a tremendous amount of variation in the design and layout of paper and optical scan ballots, even for counties within the same state. We used a theoretical framework from the survey design literature to identify eight ballot features hypothesized to influence residual votes. Our study, as well as work conducted by the National Institute of Standards and Technology (NIST) indicate:

1. Voting instructions should be located in the top left corner of the ballot, just above the first contest (in general, instructions need to be where they are needed).
2. Voting instructions should be short and simple, written at a low reading level and active rather than passive voice.
3. Ballot instructions should warn about the consequences of casting a spoiled ballot and how to correct a spoiled ballot.
4. To minimize ambiguity about where voters should mark their votes, ballots should avoid locating response options on both sides of candidate names.
5. Ballots should use shading to help voters identify separate voting tasks and differentiate between offices.
6. Ballots should use boldfaced text to help voters differentiate between office titles and response options (candidate names).
7. Ballots should avoid clutter around candidate names (such as a candidate's occupation or hometown).
8. Optical scan ballots should not use the "connect the arrow" format.

However, aside from well-designed and usable voting equipment, efforts at voter education should work to reduce voter error. For example, some local election officials take the voting equipment into the community and show potential voters how to use the equipment. In analyzing the level of "democracy" in a community, we should consider such efforts, though I know of no empirical evidence indicating that such efforts have helped reduce error.

Finally, administrative errors can affect the counting of ballots: error in counting could be conscious or unconscious. In particular, we can examine both the administrative structure and pollworkers in local election jurisdictions. First, Kimball and I have conducted work about the selection methods of local election officials and the relationship of these selection methods to election outcomes. While we have found a relationship between partisanship of those in charge

of elections in a local jurisdiction and the number of provisional votes cast and counted, we found no relationship between partisanship of officials and the number of residual votes. More work in this area needs to be conducted, but certainly, the selection method of the local election officials (and administrative structure) needs to be considered when evaluating "democracy". Not only that, but the professional activities and the state and local election law training that they undergo should be considered. How well are they trained to count our votes and/or administer the process? However, even non-partisan election officials may have certain opinions about who should hold office. An examination of the campaign or party activities in which the officials engage should be considered.

Second, the training and knowledge of pollworkers needs much more consideration. However, simply asking local election officials how much training the pollworkers receive is not likely to yield an accurate answer.[5] Rather, in-depth methods should be employed in order to understand how much training they really receive and/or surveys of pollworkers to determine objective levels of knowledge, such as those conducted by Atkeson and her colleagues and the Brennan Center.

But, for the typical citizen, legitimacy may have a lot to do with perceived authority of the government, as well as confidence and trust citizens have in the government. In theorizing about elections, legitimacy is a key reason to hold democratic elections—the citizens decide who makes policy for them, but also accept the results in the case that their preferred candidates lose. Perhaps this is more important than "objective" measures of overvotes, undervotes, and residual votes.

<u>Recommendations for consideration/discussion:</u>

1. What standards and/or "objective" measures to consider?
    - Overvotes, undervotes, residual votes?

[5] In doing so, Kimball and Kropf found no relationship between hours of training and residual votes.

- Consider races not just at the top of the ballot, but also at the bottom
- Voter confidence that their vote is counted?

2. Certain types of equipment
    - Optical scan with precinct count?
    - Full-face DREs?
    - Voter verified paper trail?
    - How much do voters know about the voting equipment? Do local election administrators work to ensure voters understand the equipment?
3. Accountability/auditing/recount procedures
4. Ballot format and/or equipment usability
    - Do paper-based ballots meet certain standards?
    - How usable is equipment?
    - Rate types of equipment for usability?
5. Administration
    - What does the administrative structure look like? How many different officials are in charge of counting ballots (or other election administration tasks, including voter registration)? What are the various tasks and who is in charge of them? How complicated is the administrative structure? Is it hierarchical? What other tasks are the administrators charged with aside from election duties?
    - Is a partisan official in charge of counting ballots or making decisions on provisional ballots? Is the person elected?
    - Does the principal administrator participate in campaign/political activities?
    - How much training do pollworkers receive?
    - What is the level of objective knowledge of the pollworkers?
    - What are community efforts at voter education? How active is it?

Recommended Reading/Sources Used

Atkeson, Lonna Rae, et al. New Barriers to Participation: Application of New Mexico's Voter Identification Law. Paper presented at the 2007 American Political Science Association Meeting.

Kimball, David C., Martha Kropf and Lindsay Battles. 2006. "Helping America Vote? Election Administration, Partisanship and Provisional Votes in the 2004 Presidential Election." *Election Law Journal*, 5: 447-461.

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Kimball, David C. and Martha Kropf. 2007. "Election Administration, Voting Equipment and Residual Votes Six Years After Florida." Paper prepared for presentation at the 2007 Midwest Political Science Association Meeting.

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http://www.vote.nist.gov (National Institute of Standards and Technology)

Table 1

Percentage of Voters Using Each Voting Method
From Kimball and Kropf (2007)

Technology	Description	2000	2002	2004	2006
Punch Card – Votomatic	Punch card is inserted behind booklet with ballot choices – voter uses stylus to punch out holes in card. Ballots counted by card reader machine.	27.1%	19.2%	11.7%	0.3%
Punch Card – Datavote	Ballot choices are printed on punch card – voter punches out hole next to chosen candidate. Ballots counted by card reader.	2.9%	2.0%	0.5%	---
Lever Machine	Candidates listed by levers on a machine – voter pulls down the lever next to chosen candidate. Machine records and counts votes.	16.1%	13.0%	12.1%	6.7%
Paper Ballot	Candidates are listed on a sheet of paper – voter marks box next to chosen candidate. Ballots counted by hand.	1.0%	0.9%	0.8%	0.4%
Older DRE (full-face)	Candidates listed on a full-face computerized screen – voter pushes button next to chosen candidate. Machine records and counts votes.	10.6%	11.5%	10.8%	7.7%
Newer DRE (scrolling or touch-screen/multiple screen)	Candidates listed on a scrolling computer screen – voter *typically* touches screen next to chosen candidate. Machine records and counts votes.	1.1%	9.9%	17.4%	30.8%
Optical Scan – Central Count	Voter darkens an oval or arrow next to chosen candidate on paper ballot. Ballots counted by computer scanner at a central location.	14.7%	12.2%	14.1%	7.8%
Optical Scan – Precinct Count	Voter darkens an oval or arrow next to chosen candidate on paper ballot. Ballots scanned at the precinct, allowing voter to find and fix errors.	22.5%	26.6%	29.0%	43.9%
Mixed	More than one voting method used (typically hand-counted paper and optical scan OR DRE and optical scan).	4.0%	4.6%	3.7%	2.4%

Democracy Index Conference—Mini-Memo (Foley)

Topic: Counting Ballots
Sub-Topic: Unverified or "Excess" Ballots

With respect to the counting of ballots, a primary goal of a Democracy Index (presumably) would be to measure how accurately a state, or locality, conducts this count.

Defining Accuracy

There are different types of errors that can affect the accuracy of a vote count:

1. *Tabulation errors.* These errors are committed by the vote-counting machines themselves, or human errors in a manual count or in the transcription and/or aggregation of machine-counted subtotals. These tabulation errors may either fail to count ballots that should have been counted, or add extra "phantom" votes that should not be included. Tabulation errors could be either inadvertent mistakes or intentional subterfuge.

2. *Wrongly excluded ballots.* These are ballots that never get a chance to be counted, but should have been: for example, provisional or absentee ballots wrongly rejected. These errors may occur because of defects in the Registration or Casting Ballots processes, and therefore may be more appropriately considered in those topic areas. But their wrongful exclusion undermines the accuracy of the result, and thus arguably should form a part of a Democracy Index's effort to measure the accuracy of a state's vote counting. One issue for the design of the Democracy Index to consider is whether it is necessary to avoid "double consideration" of this kind of error in different components of the Democracy Index. In other words, if the number of wrongly rejected provisional or absentee ballots is measured elsewhere within the Index, should this number be excluded from the Democracy Index's measurement of "vote-counting accuracy" for that reason alone?

3. *Wrongly included ballots*. These are ballots that are counted (and tabulated correctly), but should not have been: for example, votes cast by non-citizens, felons where ineligible, and other ineligible voters. Again, the error may have occurred in the Registration or Casting Ballot processes, but the error affects the accuracy of the vote count.

It would seem as if a Democracy Index should measure and report all three types of errors separately, even if the Index also aggregates them into an overall measure of accuracy. The reason is that citizens and policymakers would want to know the extent to which inaccuracies in their vote counts were caused by which type of mistake. Also to be reported separately is the *Number of Eligible Voters Unable to Cast Ballots* (because their polling places open late, for example), which is different from *wrongly excluded*

ballots—since the ballots do not even exist to reject—but precisely for that reason it is more debatable whether this number should be included in any overall measure of vote-counting accuracy.

Measuring Accuracy: Timing & Methods

There are challenges to quantifying the number of each of these types of errors. Particular challenges associated with each type may be discussed in other mini-memos, but it is worth addressing here a point common to all types. Insofar as a state engages in its own self-detection and self-correction of counting errors, should the Democracy Index in effect reward a state for these efforts by scoring the state according to its post-correction numbers? One would think so. As much as the public wants the unofficial tallies on Election Night to be accurate, what really matters are official certified results. If a state is able to correct errors between initial unofficial tally and official certification, arguably the state should not be penalized by the Democracy Index.

There may be some types of errors, however, which are sufficiently problematic that the Democracy Index should track and report them, even if a state is able to fix them by time of certification. For example, if a provisional ballot is initially rejected because of a registration error, but that error is rectified before final certification, perhaps that error should affect the state's score on some metric within the Registration component of the Democracy Index—after all, it is a problem that should not have occurred—even if this error should not lower the state's score on "accuracy of vote counting" component of the Democracy Index.

In any event, as I have discussed elsewhere, any error correction that occurs post-certification as a result of a litigated election contest should not be factored into the calculation of error rates for a Democracy Index. See Foley, *The Analysis and Mitigation of Electoral Errors: Theory, Practice, Policy*, 18 Stanford Law & Policy Review 350, 355 (2007) [a copy of this paper has been posted to the Background Readings page of the conference website]. The reason is that not all elections will be put under the microscope of a litigated elections contest. It is a more accurate comparison to measure the error rates associated with all pre-contest certified results.

But determining the number of errors in a certified election result is a daunting prospect. If the state administratively conducts its own audit or recount before final certification, then any errors discovered will already be corrected in the certified result and, by definition, those verification processes will not be able to reveal how many errors, if any, remain in the certified result. Presumably, it would be necessary to conduct a new post-certification audit to attempt to quantify this "leftover" or "uncorrected" error rate. But the state itself is not going to undertake that process, because it will have considered its pre-certification verification efforts sufficient. It would seem that any institution that attempted to implement the Democracy Index would need to devote the resources necessary to conduct its own independent post-certification audit of each state's vote counting—assuming this institution was able to get its hands on the ballots (and whatever other materials might be necessary) to conduct this audit.

One inevitable question is whether it would be satisfactory for the Democracy Index to conduct a selective audit of sample precincts in an effort to evaluate the overall accuracy of a state's certified results. A selective audit may be deemed unreliable, especially if the state's own pre-certification audit was based on a larger sample. Of course, if a state conducts its own selective audit but corrects only those counting errors found in the audit itself—and does not go on to conduct a complete recount—then it might be possible for the Democracy Index to use the state's own error rate to calculate the state's "accuracy" rate as reported in the Index. But even here, it would be necessary to be careful. The state's own audit may be designed to detect only tabulation errors, for example, paying no attention to the separate problems of wrongly excluded or included ballots. If so, the Democracy Index would need to conduct its own separate audit in an effort to measure these different types of errors.

The Specific Issue of "Unverified" (or "Excess") Ballots

One type of error that can and (regrettably, with some frequency) does occur is the casting of ballots by individuals who did not sign a poll book and whose eligibility was thus never verified. This error can be detected when the number of ballots cast in a precinct exceeds the number of individuals who signed in. Presumably, however, some instances of this type of error go undetected if other individuals sign in but fail to cast a ballot. But where a number of "excess ballots" does occur, it is a signal of a breakdown of polling place procedures, and thus the number of excess ballots in any election is a worthy candidate for inclusion in a Democracy Index.

It is debatable whether these excess ballots should be categorized as *wrongly included ballots*. The individuals who failed to sign in might well be eligible; we just don't know. If they are eligible, then it is hard to say that their ballots should not count, unless the procedural error trumps their substantive eligibility—and it may not be their fault that they didn't sign in; the poll workers may have failed to require them to do so.

Thus, it seems that the number of excess ballots should be measured separately in the Democracy Index from the number of *ineligible ballots*, defined narrowly as the number of ballots cast by in eligible voters (or plural, and therefore ineligible, ballots cast by the same voter).

Some states, in an effort to remedy the problem of "excess ballots" when it occurs, require local election officials to randomly withdraw from the total ballots to be counted the same number as this excess. Thus, sometimes the final certified results of an election will report totals that have been reduced as a result of this random withdrawal. In other cases, there will be no such reduction, either because state law does not require it or because administrative practices have failed to comply with the requirements of state law (as, unfortunately, can occur).

A question for the Democracy Index is whether either the performance or nonperformance of random withdrawal should affect the measure of a state's accuracy in vote counting. If there is no cumulative measure of accuracy, then this issue does not

arise. A Democracy Index can just separately report the number of excess ballots, the number of ineligible ballots that were wrongly counted, the number of wrongly excluded ballots, and the number of tabulation errors. But if the Democracy Index attempts to report a composite accuracy score, then this issue must be faced. It seems to me, subject to further consideration, that a composite accuracy score should deduct points for any excess ballots, whether they are subject to random withdrawal or not. If there is no random withdrawal, then the certified results include ballots of unverified—and thus questionable—eligibility. That fact is at least a blemish on the accuracy of the certified results and is worth incorporating into the Democracy Index. Conversely, even if the state applies the "remedy" of random withdrawal, it is possible that the ballots withdrawn differ from ballots cast, and thus the certified results are inaccurate to this extent. (Likewise, if the excess ballots were actually cast by eligible voters, then random withdrawal deducts from the certified results that number of *eligible* ballots). Thus, either way, the certified results are tainted by the number of excess ballots. An overall measure of the accuracy of a state's certified election results presumably should take account of this taint.

Measuring the Number of Excess Ballots

Compared to the identification of other forms of errors, it should not be that difficult to track the number of excess ballots. The states themselves should do this as part of their canvassing process. In other words, they should calculate the total number of ballots cast at each precinct and the total numbers of voters who sign in. The states should do this whether or not they require random withdrawal as a "remedy" for this type of error. If the Democracy Index did not wish to rely on the accuracy of the state's data concerning the number of excess ballots, then those responsible for the Democracy Index could conduct their own audit of this number, by (1) examining the poll books to count the number of individuals who signed in and (2) recounting the number of ballots cast at the same precinct.

Other Forms of Tainted Ballots

The problem of unverified ballots is not the only kind of procedural error that might raise questions about the validity of the ballot. Many states require election officials to initial paper ballots before they are given to voters to be cast. These initials are a form of authentication. Indeed, excess (i.e. unverified) ballots that lack these initials have historically been especially suspicious—suggestive of fraudulent ballots in an effort to stuff the ballot box. Another kind of procedural, or chain-of-custody, requirement is that ballot containers contain seals that remain unbroken until opened by specifically authorized individuals. If seals are broken improperly between the time the ballots are cast and the time they are counted, or canvassed, there arises the question whether the ballots may have been tampered with. Of course, the breaking of the seals may have been just an inadvertent clerical error—and especially if there is no problem of excess ballots, such that there is a signature of an eligible voter corresponding to each ballot—there is a natural reluctance to throw out the procedurally compromised ballots, which may contain the perfectly valid votes of faultless voters.

Still, the Democracy Index could record as a separate category the number of ballots that suffer from these kinds of procedural irregularities. It would be necessary to define the kinds of procedural irregularities that would fall within this category. For example, what if the envelope of an absentee ballot is torn during postage?—an issue that arose in a recent Pennsylvania recount. (If the envelope is ripped enough, the ballot might have been tampered with.) The fact that different states have different procedures might also make it difficult to develop a common metric by which to judge all the states in this respect. Collecting the relevant data would also be more difficult than identifying the number of excess ballots: the states are unlikely to be the practice, or under a legal duty, of keeping track of all ballots that suffer from any kind of procedural irregularity.

In any event, even if the Democracy Index were to develop a way of measuring the number of procedurally tainted ballots, I would argue that this number should be kept separate from the number of excess ballots. The problem of excess ballots, I would suggest, is qualitatively more severe—because there is no registered voter associated with the ballot cast. Were a duly registered voter exists for each ballot cast, there would need to be some manipulation of the ballot that is not superficially evident in order to undermine its validity.

For the same reason, I would be disinclined to include the separate number of procedurally tainted (but not excess) ballots within any composite measure of accuracy for the state's certified results. Yes, the ballots may be procedurally tainted, but not so much as to cast doubt on the count itself. In this respect, the lack of excess ballots makes a crucial difference. To me, it would dilute the measure of a state's vote counting accuracy to say that the state is inaccurate to the extent of its procedurally tainted (but not excess) ballots.

Conclusion

Thus, this mini-memo suggests that, for purposes of a Democracy Index, a state's overall "accuracy rate" should consist of four separate component parts: (1) tabulation errors, (2) wrongly excluded ballots; (3) wrongly included—specifically ineligible—ballots; and (4) excess ballots whether or not remedied by random withdrawal. The first three of these, again, would be measured at time of final certification, prior to a judicial contest of the result. The fourth would be measured by a tally of original precinct records, either conducted by the state or the Democracy Index itself.

Appendix: Results and Processes

If the Democracy Index successfully developed and reported this "accuracy rate" for each state, the Index might be considered sufficient—at least with respect to the "Counting Ballots" component of the voting administration process. But perhaps not.

Such an "accuracy rate" would measure the *results* of the state's performance with respect to counting ballots. Yet perhaps there are reasons why the Democracy Index should attempt to grade states on the quality of the *processes* they use to conduct their

counts. For example, perhaps independent of any measure of the accuracy of the counting itself, states should score highly in the Democracy Index if they employ some kind of auditing process in an effort to verify their own counts. Maybe even the better the auditing process, the higher the score. (Measuring the quality of a state's *processes* would be different from measuring the number of procedurally tainted ballots, which is a different kind of *result*.)

Similarly, if the *transparency* of a state's counting process is an important democratic value independent of the count's *accuracy*, then perhaps the Democracy Index should attempt to measure the degree to which a state's counting process is transparent. The same might be said for the value of *non-partisanship*: if it is independently desirable that a state's counting process be structured in an inherently non-partisan (or at least bi-partisan) way, should the Democracy Index include a component designed to measure a state's achievement with respect to that value as well? [Cameron Quinn's separate mini-memo raises the possibility that the Democracy Index might include this metric: the extent to which a precinct's team of pollworkers or vote-counters deviates from a norm of equal bipartisanship.]

This distinction between counting *results* and counting *processes* is related to the "outputs versus inputs" distinction that pervades all topic areas relevant to the Democracy Index, as well as to the creation of comparable indices in other domains (e.g., education, as Lynn Olson will discuss). But it is not clear (at least to me) that transparency, for example, is an input rather than output. The ability of the media to view the verification of provisional ballots, for example, may be an "input" that affects the overall "output" of transparency. (Likewise, perhaps, access to source code of voting machines as an "input" affecting transparency.)

But there may be a good reason to focus exclusively on the results of counting process in the design of the Democracy Index (at least in its initial iteration). To be successful, the Democracy Index must be publicly acceptable as a measure of the quality of a state's performance in voting administration. (By "publicly," I mean the portion of the public that pays attention to these issues and therefore influences political decisions on them.) To be publicly acceptable, in turn, the Democracy Index should be as simple and accessible in itself as possible and avoid controversies over what a "good" or "ideal" elections system would be. Therefore, if a Democracy Index attempted to measure the transparency and/or nonpartisanship of a state's counting process, as well as its accuracy, it is more likely that the Index would become overly cumbersome for the public to easily understand, and it would be more likely to spark controversy as well. There is a virtually universal consensus that we want our vote-counting processes to produce accurate results, and therefore it would seem that the Democracy Index might do best to focus on attempting to measure a state's degree of accuracy.

Mini-Memo - Counting Ballots

There are three types of issues related to counting ballots that each need separate consideration in measuring best practices:

I) Issues related to whether all ballots are counted within a state
II) Issues related to determining voter intent
III) Issues related to provisional ballots

I) Issues related to whether all ballots are counted properly

[For clarification when using the word *ballots* in this discussion, unless otherwise clarified, I refer to all properly cast ballots submitted by properly registered voters, whether by paper ballot or machine ballot, and whether in person or by mail; I do not refer to conditional, provisional or challenge ballots.]

A) Failure to count absentee ballots unless a contest is close

In the absence of state instruction, or perhaps with state approval, some localities within some states, and perhaps some states, have chosen not to count any absentee ballots unless the margin of victory for a particular contest is small enough that the absentee ballots cast would make a difference in the outcome of the contest. Only in these circumstances do the local election officials (LEOs) open and count absentee ballots. Some absentee voters, when finding out that no one bothers to open and count their ballots have felt disenfranchised, and have anecdotally suggested they were less likely to vote again in the future.

One question that the group may want to consider is whether the failure to count every properly cast ballots submitted by properly registered voters is a failure that should be measured.

B) Transparency

When ballots are counted, it is important for voters to feel confident that the counting is done accurately, particularly if a contest is close or contentious. Without transparency, how can the public be confident that those counting are counting accurately and counting completely? Voters, whether or not partisan, will never have confidence in an election expected to be close, unless, at least, some people who want to watch the counting are allowed to do so. Certain types of observers can sometimes be a proxy for voters. For example, the press might be a proxy for the public, or a candidate's observer may be a proxy for the interests of a political party, or vice-versa.

One question that the group may want to consider is whether the counting of ballots is transparent by design, i.e., that observers are allowed, and whether the failure to allow observers inside polling places is something that should be measured by the index. If there is agreement to measure such, then there will be additional questions to discuss appropriate numbers of observers, and what rules are appropriate related to observers, such as who is allowed to be an observer. For example, if local observers are allowed, is this enough, or must a polling place also allow observers who are press, or those who are not locally registered voters (or even US citizens, such as the ODIHR observers).

C) Bipartisan Representation

As previously stated, when ballots are counted, it is important for voters to feel confident that the counting is done accurately, particularly if a contest is close or contentious. If only one side of a contest is counting the ballots, the other side(s) are unlikely to have confidence in the counting. Partisans, such as candidates and their supporters, will never feel confident in close races if they do not have identified advocates at the table as votes are counted, that is, unless all the "foxes" are guarding the henhouse. Additionally, voters, whether or not partisan, will never have confidence in an election expected to be close, if people who want to watch the counting are excluded; the ability of some kind of observers to observe the counting is also an important design characteristic. Virginia & Puerto Rico are good examples of legislative design to allow bipartisan or multipartisan representation during all phases of elections.

One question the group may want to consider is whether the system of pollworker selection, recruitment and deployment is designed to ensure bipartisan representation during the casting and counting of ballots. This does not necessarily mean that bipartisan representation is a fact in every polling place, but that it is possible to have bipartisan representation, whether or not the parties/candidates/advocates for an issue provide such representation.

II) Issues related to determining voter intent

This is different from ballot counting issues as it refers to ballot marking issues for voters and whether the state, as clearly required by *Bush v. Gore*, is providing guidance on when a ballot is properly marked and, therefore, should be counted.

A) Uniform Vote Counting

Is there a clear standard with sufficient guidance to ensure uniformity of voting counting? Some states' rules are clear, for example, if a state uses a "machine" standard for vote counting, it is clear that on a vote made on a machine, or on a ballot designed to be counted by a machine, such as an

optical scan ballot, that unless the voter follows the instructions, for example, "fill in the bubble to the left of the candidates name" that ensure that a vote is counted by the machine, then the vote is not counted. This is a clear rule that, *ex ante*, is something those on both sides of a contest can consider fair, as there is no ambiguity about marking the ballot to get the vote to count. Other states use the concept of "voter intent" to guide ballot counting. A state using a voter intent standard must be more pro-active in providing guidance about under what circumstances a vote is clearly showing voter intent, or it is likely that the polling places will vary in how they count similarly marked ballots. For example, remember the different rules on "pimpled," "dimpled" and "hanging" chad in the 2000 elections? Similar problems can occur related to write-in vote rules, as well as related to different types of marking on ballots.

One question that the group may want to consider is whether the failure to have fairly details instructions on when a mark is sufficient to count as a vote, is a failure that should be measured.

III) Issues related to provisional ballots

HAVA has made clear that states may, when using provisional ballots, properly make policy choices about when provisional ballots are counted. Consequently, I do not think a measure of best practice should address this issue. There is, however, an issue that should be measured, if a measure can be developed, related to provisional ballots, and whether they are being properly offered. Certain states are not required to use provisional ballots, such as those with Election Day Registration (EDR), although some EDR states also provide provisional balloting for certain situations. But there has been some problem nationally with polling places, or even localities, where it appears that those who are eligible to vote provisionally are not being provided the opportunity to have a provisional ballot. This is not to suggest that if a voter is eligible to vote in a different polling place from the one in which he appears, that the officials may not try to direct him to the correct polling place if the state rules provide that a ballot will not be counted unless the voter is in the proper precinct. The concern in this paragraph is where officials (a) have no provisional ballots, or insufficient numbers, or (b) have the provisional ballots, but (i) will not provide one when asked, or (ii) will not notify the voter if they are not on the voter registration rolls that they are entitled to vote a provisional ballot, and what are the rules that will ensure it is counted, or (iii) will not provide the voter, as required by HAVA, written notice of how to check on the status of the counting of their ballot.

One question that the group may want to consider is whether the failure to provide provisional ballots or related information to an eligible provisional voter is a failure that should be measured.

Counting Ballots: Transparency and Verifiability

Prepared for Democracy Index Conference, Columbus, Ohio. Sept 28-29, 2007
Doug Chapin, *electionline.org*/Pew Center on the States

It's not the voting that's democracy, it's the counting. - Tom Stoppard, "Jumpers"

The role of elections in a democracy is to balance two competing interests: 1) the individual voter's interest in having her voice heard on issues and 2) society's interest in a system that allows for effective government through definitive electoral results. Vote counting – the alchemy by which votes are transformed into results – is a vitally important if underappreciated part of that process.

Any effort to construct a Democracy Index must therefore contemplate a way to measure the overall quality of the vote counting process.

As with any index, we start with an ideal:

Every vote counting process will –

1. *account for all votes cast whether or not eligible to be counted;*
2. *tally only those votes cast that are eligible to be counted;*
3. *ensure that vote-counting accurately captures eligible votes as they were cast;*
4. *identify the number of cast but uncounted votes; and*
5. *capture information about how and why cast votes were uncounted.*

The next step is to identify potential measures that will assess the degree to which a specific process compares to the ideal. These will likely include:

- *System-centered measures* which focus on accurate classification of cast ballots. This type of measurement – already explored by residual voting analysis – compares votes cast to votes counted in an effort to identify "leaks" in the system (the types and causes of which will be covered more in depth in the other mini-memos in this section) and quantify the extent to which such "leaks" affect the overall tally and why;

- *Vote-centered measures* which focus on accurate tally of individual ballots. This is the province of the growing number of state and local post-election audits, which aim to replicate the tallying experience in smaller-scale samples in an effort to assess the health of the system overall; and

- *Qualitative measures* focused on the "observability" of the entire counting process. The focus is on voters' access to the process – either via in-person observation or access to data and/reports – upon which they can make their own assessments of the system's health. Another variant is the extent to which a jurisdiction uses self-assessment to critique and improve its own processes.

The final step is to amass data - the raw material underpinning these measures. Again, these are likely to fall into three basic categories:

- *Statistical data* – specifically, numerical data that is the basis for both system- and vote-centered measures. This category includes not just traditional election returns but also other "counting stats" from the electoral process such as total ballots cast, and spoiled ballots. Ideally, it would also break down ballots cast by:

    - type of ballot (regular/absentee/provisional/etc.);
    - source of ballot (precinct/vote center/early voting location/mail/etc.);
    - ultimate resolution of ballot (counted/uncounted); and
    - if uncounted, the reason why (lost/spoiled/ineligible/etc.);

- *Documentary data* – specifically, the actual documents used in the vote-counting process, including ballots, VVPATs, envelopes, and any other form that tracks the flow of votes through the counting process (i.e. chain of custody reports/receipts). These documents provide the "paper trail" that not only allows a ballot-by-ballot audit but also enables a deeper analysis of any statistical anomalies identified via statistical data;

- *Qualitative data* – This data is going to be relatively straightforward yes/no questions about the vote-counting process, e.g.:

    - Is the public allowed to observe vote-counting?
    - What role, if any, does the public have beyond observation in any post-election audit (selection of precincts, participation in actual counting etc.)?
    - Are the results of the vote-counting process made available in a timely and accessible manner?

I'd guess that collecting and analyzing all of this information will be the easy part; establishing normative guidelines that make it useful as part of the Democracy Index will be more challenging. Questions that need to be addressed (both at the conference and thereafter are):

- How do we balance the desire to analyze the process with other interests – in other words, to what extent will states be granted some "opacity" in the vote-counting process in order to safeguard privacy or meet certification deadlines?
- Will more transparent jurisdictions fare poorly because more data is available or will they get credit for "showing their work"?
- To what extent should self-assessment be rewarded in the index – that is, if a state is not only collecting the data but using the results to improve its process should that improve its rankings?

I look forward to discussing these questions and more in Columbus.

Designing a Democracy Index
Post-Voting Procedures: Provisional Ballots
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Introduction

Late in the evening of Tuesday, November 7, 2004, the Franklin County Board of Elections reported that 14,462 provisional ballots had been cast during the General Election held that day. The Ohio Secretary of State would later report that 158,642 provisional ballots had been cast by voters across the State of Ohio. Of Ohio's 2004 General Election provisional ballots, 123,548 of the statewide total and 12,124 of Franklin County's number were ultimately included in the official tally of votes, having been verified as properly cast by an elector eligible to do so under the State's election laws. The narrow margin of victory in Ohio and the large number of provisional ballots cast in the State during the 2004 election highlights the important question of what happens after the polls close. This paper, from the perspective of an Ohio elections administrator, seeks to shed light on post-election procedures, including the process of counting provisional ballots, with the goal of identifying indexes to gauge the relative ability of voters to engage in their franchise and the effectiveness of elections administrators in executing their responsibilities and identifying areas for improvement.

General Post-Election Procedures

The process of determining whether or not a provisional ballot will be counted is just one of several post-elections activities elections administrators must oversee and conduct. Before beginning their canvas (or official count), Ohio elections administrators must wait ten days following the election to allow for the return of any remaining ballots from overseas and military voters postmarked by Election Day. During this ten-day window, elections administrators

conduct several audits of elections records. The serial number from tamper-proof and tamper-evident seals and that were recorded by precinct election officials on Election Day from the voting equipment, ballots, and supplies are compared to the numbers recorded by elections administrators when placed on the materials prior to Election Day. The number displayed on the protective counter, the voting equipment's odometer, is compared to pre-Election Day records to demonstrate that votes were not placed on the machines during the time that the equipment was sealed and delivered to the polls for use on Election Day. For elections administrators using paper-based voting systems, the remaining number of unvoted ballots will be reconciled with the number cast and spoiled on Election Day. The number of voters who presented themselves to vote on Election Day as recorded in the Signature Poll Book or Roster of Voters is tallied and compared to the public count to determine the difference, if any, between it and the number of votes recorded on the voting equipment (the public count).

Provisional Ballot Post-Election Procedures

Under current Ohio law, after completing the provisional ballot application at the time of casting his/her provisional ballot, a provisional ballot voter may add or change identification information on the voter's provisional ballot application during the ten days following the election. Once the date for a provisional voter to cure deficiencies on the provisional ballot application has expired, elections officials then begin the process of verifying the identity and eligibility of the provisional voter to determine whether or not each ballot can be counted.

Using the information on the provisional ballot application, elections administrators ascertain whether or not the provisional voter is a previously qualified elector of the State of Ohio. For those provisional voters who meet the first test, elections administrators check the Signature Poll Book from the voter's former voting precinct (if different from the precinct in

which the provisional ballot was cast) to ensure that the provisional voter didn't vote, or attempt to vote, twice. Once these steps have been completed and the voter's identity and qualifications as an elector established in the affirmative, the provisional voter's ballot is tallied as a part of the official canvass.

Provisional Ballot Post-Election Procedures Indexes

Because of the variation in election laws between States regarding provisional ballots, care must be given to craft indexes that accurately measure performance. In many cases, sub-categories may allow for proper segmentation, thus better comparison, of the data. For instance, 129,432 provisional ballots were cast in Ohio during the 2006 General Election while in Florida only 14,550 provisional ballots were cast. If one were to use the total number of provisional ballots cast as a lone index, one could suggest that Ohio has weaker "democratic health" than Florida because more provisional ballots were cast here than there. However, upon a closer examination of the context of the facts, in 2006, Ohio began requiring those voters who appeared at their precinct without proper identification documentation to cast provisional ballots, contributing to the increase in the number of provisional ballots. While "total provisional ballots cast" is an important dataset, this author believes that sub-categories describing the reason that the provisional ballot was cast (i.e., not in the poll book, improper/no identification, previously requested absentee ballot, etc.) are superior and more accurate gauges of the overall electoral health of an election administration system. The data contained in these sub-categories can then be compared across jurisdictions (e.g., the number of Ohio and Florida voters casting provisional ballots because their names were not in the poll listing) used as cues to begin identifying ways to reduce the overall number of provisional ballots cast.

Another important index, related to the first, is the number of counted provisional ballots. Wherein the first index measures input (number of provisional ballots cast) based upon external factors (largely, the actions or inactions by voters and poll workers, over which election administrators have less direct control), the index of counted provisional ballots measures output based upon internal factors that should be completely controllable by election officials. Were all of the provisional ballots eligible to be counted in fact counted? As with the first index, similarly named or descriptive sub-categories may be more informative than the aggregate and, again, care must be given to ensure that proper comparisons are made between like jurisdictions.

Further inquiry into the questions that follow from the examination of the sub-categories can reveal data that may be relevant to other election indexes. For instance, when examining the possible sub-category of "uncounted provisional ballots from non-registered voters," the logical question to ask is "why?" The non-registered status of a provisional ballot voter whose ballot was not counted could reveal problems with state or local databases of registered voters that could be informative for indexes related to voter registration databases.

Other Post-Election Procedures Indexes

Indexes of other, more general, post election procedures go directly to the structural integrity and performance of the election administration system by measuring the accuracy of the tabulating equipment and the auditability of the elections records. Different from the indexes specific to post-election provisional ballot procedures, these general indexes may be more easily normalized across jurisdictions with differing rules and regulations and could be the basis for developing industry performance standards. One such measure could be the extent to which the signature poll book or roster of voters reconciles with the public count of the voting machines and whether discrepancies are properly documented. Inevitably, not all jurisdictions in all

elections will have fully reconciling documents. However, if there were a professional industry standard or tolerance for error in such matters, one could predict, with confidence, the probability that such an error was the result of fraud and/or system failure or inconsequential human error.

Conclusion

Many general post-election procedures are universal, readily lending themselves to the development of indexes to measure the relative strength or weakness of a local elections administration system as compared to any other. However, developing indexes to measure post-election procedures relative to the processing and counting of provisional ballots requires special treatment due to the differences in state laws governing the casting and counting of provisional ballots. The creation of sub-categories within the index for post-election provisional ballot procedures may correct for these variables by providing for the grouping of like data. More important than establishing indexes for mere comparison and measurement is the value that the indexes and their sub-categories add enabling elections administrators, law-makers, academics, and the public to quickly identify problem areas and improve where necessary.

Administrative Recounts: Accuracy and Speed

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Recounts are governed by state law. The circumstances under which a recount can be conducted, who can request such a recount, and how the recount can be conducted all vary from state to state. In different states, recounts can be initiated by candidates or citizens, or are part of a mandatory process when the vote total is within a certain threshold. A few states even allow for "no-cause" automatic recounts. Decisions about the cost of recounts and the timing of such recounts are also established under state law. In some jurisdictions, the frequency of recounts will be a function of electoral competition (higher levels of competitions means closer elections and more potential for recounts). The finality of recounts—the ability of the process to satisfy losers—is critical for ensuring that contests and challenges do not extend beyond the typical certification deadline and create uncertainty in the resolution of the election.

At the outset, it is important to note that, although some states appear to treat use the terms "audit" and "recount" interchangeably, there is a difference between an audit and a recount. As one source explains:

> A recount looks only at the end of the voting process - the final result - not at the systems, procedures, and data that form a path to the final result. It is highly probable that the people conducting the recount will get a different total during each recount, but have no chance of determining if and where errors were made along the way to achieving that final result. An audit...looks at each transaction that makes up an election result. During an audit process, problems are detected and remedied end-to-end, at every step of the voting process from pre-election setup and L&A testing, through Election

Day, and ending at canvass and the final result. Each transaction [or a sample of transactions] is tracked from initial entry to final result, so end totals are consistent and highly accurate, with the ability to track every vote choice on every ballot individually.[1]

In short, a recount is intended to ensure that all ballots in a specific race were tabulated accurately. An audit is designed to determine if the election itself was conducted according to proper procedures and if the tabulation of all races occurred accurately, based on following these procedures. There are obviously differences in the speed with which these two activities can be completed and the accuracy that arises from each process. This definition also raises several important questions for any Democracy Index:

- Are the scope and circumstances under which recounts are conducted political decisions or are their "best ways" for conducting recounts and the scope of the recount?
- Are current so-called "post-election audits" really audits or merely glorified recounts?
- What would a true post-election audit look like and what data would be collected throughout the process?
- Should states be evaluated for having "show" post-election audits or should they be evaluated on the statistical validity of the audits and for the variety of races audited?
- How would an audit procedure affect ballot tabulation? That is, would you tabulate a precincts ballots or any absentee ballot only after you had verified through the audit that the ballots were legitimate? (And how would you address ballots that had a break in their chain of custody?)

[1] See the report "Audits versus Recounts" produced by Votehere, http://www.votehere.net/auditvsrecount.php

Speed and Accuracy

The speed and accuracy of the counting process is predicated on several factors. First, what ballots are recounted? Second, how are the ballots recounted? Again, both of these decisions are established in state law and the clarity of the law is critical to having speed and accuracy in the process. The scope of the recount is critical because it is very different to recount all ballots in a jurisdiction as opposed to just the ballots from a small number of precincts where problems have been alleged. The clarity of the standard for how to recount ballots—and determining what constitutes a vote in the recount versus the initial count—will also make a difference. Recounting ballots using the same method as was used in the original count will likely produce a different result than would occur if the recount is conducted using a hand-count of the ballots. There are obvious differences in speed as well; hand counts will take longer. The question is whether hand counts allow for more voter intent to be discerned from "troubled" ballots or whether the finality that comes from technological counting is preferred.

For the Democracy Index, the speed and accuracy of recounts raise several critical issues:

- Should jurisdictions care about the speed of counting/recounting ballots?
- What is the level of effort local election officials should make to divine voter intent?
- How clear are the standards for counting and recounting that feed into the recount process?
- What protocol should be used for hand counting any ballots or conducting any recount? For example, how transparent should the process be, how should recount teams be organized, and how should vote count standards be enforced and supervised for consistency across the recount?

The current debate over voter-verified paper audit trails also raises questions about how recounts and audits are conducted. For example, many states have audit requirements for electronic voting only, not for paper-cast ballots. One key question would be to determine if the way in which the recounts or audits are conducted are neutral to the technology used.

Democracy Index Conference—Mini-Memo (Huefner, Moritz College of Law)
Sept. 14, 2007

Topic: Post-Voting Procedures
Sub-Topic: Judicial or Legislative Contests: Frequency and Impact

What Virtues to Promote?

Identifying objectively quantifiable measures for use in a Democracy Index may at some preliminary point require assessing the relative importance of a number of potential virtues of an election system. These virtues might include access, integrity (including accuracy and transparency), efficiency, and finality, although other virtues could also easily be proposed. But presumably some shared understanding of which virtues a Democracy Index wants to promote, and when or in what stages of the election process, is antecedent to finding a way to measure how well an election system in fact is promoting them.

Measuring the strength of a system's post-voting procedures – including its provisional vote counting processes, its recount processes, and its election contest processes – might at first glance seem primarily to involve measuring how well the system preserves (or restores) *integrity* in the face of an unsettled election outcome, and perhaps secondarily measuring with how much *finality* (both how quickly and how conclusively) it does so. Yet the *efficiency* with which it does so, perhaps in terms of the amount of both public and private resources expended, might also merit evaluation. And also critically important may be the extent to which a state's post-election processes preserve and enhance *access* to voting, both in how well these processes are able to count as many valid votes as possible in the immediate election, and in the kinds of incentives and procedures that these processes create to improve access in future elections. Accordingly, one threshold matter is whether to seek metrics evaluative of all of these virtues at each point of the post-voting process.

What Relationship Between Post-Voting Metrics and Other DI Components?

From a fairly different dimension, another challenge in identifying appropriate metrics for a state's post-voting processes is the reality that whether post-voting processes are even put to the test will often be highly dependent on how well other election processes prior to and during Election Day have been administered. Specifically, while recounts (both automatic and requested) may occur merely because an election is close – a circumstance which in itself is no indictment of a state's election processes (on the contrary, at some broader level close elections may be a sign of a state's political health) – the same thing cannot so easily be said about election contests. On the contrary, when candidates or their supporters conclude that they have a basis for a judicial or legislative challenge to the official results, whether with or without an administrative recount, the mere existence of the election contest may itself be an indicator of weaknesses elsewhere in the election system. Should we therefore use a count of election contests as a measure of a failure elsewhere in the system? Should our post-election metric instead be designed only to measure how well the post-election processes operate whenever they are called into use? Or should we be doing some of both?

For instance, as Ned Foley's mini-memo on "Counting Ballots" notes, some measure of tabulation errors – which certainly have the potential to give rise to a judicial contest – conceivably could be incorporated into a Democracy Index at several places. A DI metric based on the frequency with which courts in a given state nullify or reverse the outcome of an election therefore has the potential to result in a double counting of tabulation errors, if such errors, as also measured elsewhere, are the basis for the judicial decision. Similarly, provisional balloting could be measured in several places, as the number of provisional ballots cast and counted will also be a partial reflection of the state's registration processes, database maintenance efforts, voter education activities, and poll worker training programs. Meanwhile, the number of provisional ballots is likely to correlate with the frequency of election contests, as a larger number of provisional ballots will provide candidates with more potential votes over which to fight.

Where such correlations are high, should a DI incorporate only one of the potential metrics, to avoid double counting? Matters such as the extent of provisional balloting (including both ballots cast and ballots counted), and the frequency with which official election results are nullified in court contests, are readily quantifiable and objective measures that in some manner presumably should be included in a Democracy Index. Indeed, a "high rate" (however defined, itself an interesting DI question) of judicial or legislative nullification of official election results might be the canary in the coal mine, showing the existence of serious problems in an election system. High provisional balloting also is indicative of problems elsewhere. But should these metrics be abstracted from their underlying causes? How?

Measuring the Health of Post-Voting Processes: Election Contests

Independent of how post-election processes relate to other potential DI components, it remains important to consider what metrics can best assess how well a state (1) handles provisional ballots, (2) conducts recounts, and (3) manages election contests when they do occur. The remainder of this mini-memo will focus on measurement issues related to the strength of a state's election contest processes.

Frequency of election contests. As previously described, the frequency of election contests alone could serve as an imperfect measure of an election system's health (although the subsidiary rate at which election results are nullified by an election contest is probably more useful for this purpose). Still, the extent to which an election system can produce an acceptable outcome without either side resorting to a contest ought to serve as some measure of its strength. A more sophisticated metric might be to measure frequency of contests correlated to closeness of official result, as it might mean comparatively less that no contests have occurred in a state in which races are typically won by a landslide. In contrast, it is a dramatic endorsement of an election system when all parties are willing to accept the administrative tally even in a close race. Likely relevant in such a circumstance will be the nature of the recount process used.

Timetable for resolving election contests. In any election contest, it disserves candidates and the public if the contest drags on past the time when the new term for the

office in question begins. In some cases, however, this may be inevitable, particularly when at issue is a legislative or other race the contest of which is committed to the incoming state legislature to resolve. But when the contest tribunal is a court, one DI metric might be whether a state has established methods for expediting election contests in order to minimize the risk of a final resolution occurring after the commencement of the term of office.

With respect to the selection of presidential electors, the time for resolving a contest must at the very latest be before Congress counts the votes of the (potentially competing slates of) presidential electors at the beginning of January, and preferably ought to be no later than the federal "safe harbor" date of six days before the electors cast their votes in mid-December (under current federal law), five weeks after the November election. This is a remarkably compressed timetable for traditional courts to follow, especially if a state's recount processes consume several weeks after a November election and completion of the recount is a prerequisite to a contest.

Impact of election contests. Also as previously discussed, a DI might incorporate some measure of the impact or outcome of election contests, reflecting the frequency with which the contests (a) completely reverse an outcome, (b) simply nullify the outcome or render the election void, (c) identify errors that do not alter the results, or (d) find no proven errors. Each of these outcomes might merit a different impact on a Democracy Index. However, developing comparative measures might be complicated by the fact that different states employ different standards of evidence in determining what relief to grant. Adjusting for these evidentiary standards would be important, but difficult. In addition, the extent to which the outcome of a contest can be trusted to truly reflect the accuracy of the underlying election will also depend in turn on the neutrality and independence of the contest tribunal, discussed next.

Tribunal hearing election contests. Most election contests are heard by regular state courts, although as noted above some states assign the state legislature the responsibility of adjudicating legislative election contests. In a few states, the legislature also hears contests over some statewide or other races. Meanwhile, some states provide for special election tribunals, generally composed of a panel of existing state judges. Other states provide that contests for certain offices are heard directly by the state's high court, while in still other states election contests originate at the trial court level.

One difficult question for a Democracy Index is how to evaluate and compare the neutrality and independence of these various election contest forums. Should a DI preference one form of tribunal over another? On what basis? A related question is whether a state's judicial contest processes include a right to appeal. Arguably, if a neutral, independent, multi-member body hears the contest in the first instance, its decision should be final, thereby serving the interest in a prompt resolution. This might argue against letting general jurisdiction trial courts handle election contests, or at least assigning them only contests involving local rather than statewide offices.

Creating a specialized elections court composed not of any sitting judges but of bipartisan election experts might involve greater neutrality, and potentially also a greater ability to expedite a proceeding, but perhaps at increased cost. Should this be encouraged through a DI metric? If so, what would the preferred form(s) of this tribunal be?

Clarity of standards for relief. Another means of increasing confidence in election contest tribunals is to minimize the amount of discretion they have in deciding when and what relief is in order. Some state election contest statutes provide only very generally that courts may nullify election results when a contestant establishes sufficient election irregularities that the official outcome cannot be trusted, without much guidance about how the tribunal is to reach this conclusion. One fairly complex DI metric therefore might involve assessing the extent to which state election contest statutes cabin judicial discretion by specifying which of a range of predictable election failures (such as lost votes, excess votes, unlawful but not specifically identifiable votes, campaign dirty tricks, absentee ballot fraud, ballot design problems, etc.) would justify what sorts of contest relief (whether no relief, or calling a new election, or calling a partial new election for select precincts or voters, or adjusting vote totals). A related issue would be whether and in what circumstances the state permits proportionate or other speculative but perhaps statistically defensible adjustments of vote counts. But just what approaches to these questions a DI metric should favor needs careful discussion.

Democracy Index Conference—Mini-Memo (Foley)

Topic: Post-Voting Procedures
Sub-Topic: Unresolved Contests By the Date for Taking Office

Note:

Tom Mann, who was originally assigned this topic, will be unable to attend because of an unexpected conflict. I am preparing this mini-memo in his place. In doing so, I am drawing heavily on pages 355-361 & 379-281 of my paper, *The Analysis and Mitigation of Electoral Errors: Theory, Practice, Policy*, 18 Stanford Law & Policy Review 350 (2007) [a link to this paper is provided in the Background Readings section of the website for this conference].

Intro

The post-voting elements of election administration, including recounts and litigated contests of elections, have tended to receive less attention in policy discussions concerning election administration reform. One reason is that they do not involve the voter directly as a "customer" of the voting process; therefore, insofar as election administration reform embraces a "customer satisfaction" model [cf. Gerken mini-memo], post-voting procedures will receive less attention that erroneous purges, long lines at polling places, faulty ballot design, and even machine failures in tabulating ballots (the last of which occurs after voting, but very immediately affects the utility of casting a ballot). Another reason is that the special post-voting procedures of recounts and contests are triggered infrequently, usually only in elections with extremely small margins of victory.

Nonetheless, the importance of a state's post-voting procedures should be evident to the participants of this conference, particularly because they can make such a big difference in an exceedingly close race (where procedures are most likely to affect the correctness, and perhaps even the perceived legitimacy, of the outcome). A fully developed Democracy Index, therefore, would endeavor to measure the quality of a state's performance in these post-voting elements of election administration. The question, however, is how to do so.

Alternative Attributes to Measure

1. *The Verification of Provisional Ballots*. This particular post-voting procedure now occurs in virtually all elections and certainly seems worthy of evaluation in a Democracy Index. It is a subject of other mini-memos, however, and I will leave it to them.

2. *Administrative Recounts*. It is unclear to me what features of administrative (non-judicial) recounts a Democracy Index should attempt to measure. Is the frequency of administrative recounts a good or bad thing? States obviously have different laws on what triggers an administrative recount. Should the Democracy Index reflect a policy judgment on that point? Where they occur, it would seem

that they should happen quickly, and therefore measuring the speed of administrative recounts might be worthwhile, although not necessarily the highest priority for a Democracy Index. Their accuracy is obviously important, although if the Democracy Index attempts to measure the accuracy of certified election results whether or not an administrative recount has occurred (as discussed in my separate mini-memo "Counting Ballots: Excess Ballots"), then it is unclear whether the accuracy of the recount should be made a distinct component of the Democracy Index. [See Thad Hall's mini-memo on these and related questions.]

3. *Litigated Election Contests*. The frequency of litigation over the outcome of elections in a state would seem, tentatively at least, a worthy candidate for inclusion within a Democracy Index. Such litigation is intrinsically undesirable, even if sometimes necessary, and indicates that the election administration process has broken down in some way to some extent. If it were possible, it would be helpful to screen out frivolous lawsuits. It also would seem important to express the frequency of contests in terms of the number of *close* elections in a state, rather than *all* elections, since a state should not be penalized for having competitive elections worth fighting over. (But there might be a point at which elections are *so close* that litigation is all but inevitable, and thus the state should not be faulted if the results of such an election end up in court. I explore this concept at greater length in *The Analysis and Mitigation of Electoral Errors*.) The Democracy Index might also wish to distinguish between successful and unsuccessful contests as subsets of non-frivolous claims. [Steve Huefner's mini-memo may address these matters further.]

4. *Unresolved Contests By Date For Taking Office*. This distinctive problem is the specific sub-topic for this mini-memo, to which I shall now turn.

The Length of Litigation

One crucial attribute about litigated election contests is the number of days it takes to resolve them. We all know the importance of this from *Bush v. Gore*, where the Court shut down Gore's contest because the Safe Harbor Deadline, with the date of the Electoral College meeting just a few days thereafter. Most of us may also recall the contest of the 2004 gubernatorial election in Washington, where the trial judge did not issue his decision until June of the following year—long after the certified winner was permitted to take office. Likewise, litigation over the 2006 congressional election in FL-13 is still pending, both in court and before the House of Representatives.

One possibility, therefore, is that a Democracy Index might measure the average length of election contests in each state, with the lowest number being the best score. This length could be measured from the date the contest was filed or, better yet in my judgment, from Election Day—because what matters ultimately is how long after Election Day it takes to conclusively identify the winner. If the Democracy Index were to include this measure, it is unclear whether it should also separately measure and report the average length of administrative recounts.

The Democracy Index could calculate the average length of litigation for all contests within a state or subdivide the category into statewide and local races—contests of statewide races being generally more momentous. Contests do not occur that often, however, so one question would be what timeframe to use to calculate these averages. One could go back to 1900 and still not have many statewide contests in most states. But it is unclear that the length of a contest in 1906 is meaningfully related to the length of a contest in 2006. The laws and procedures governing these contests may have changed significantly with in the same state over that time.

An alternative possibility would be for the Democracy Index to attempt to score each state's law, as it exists on the books, governing the timetable for litigating election contests. States with laws that mandate resolution of the contests quickly would receive higher scores. There are several problems, however, with this approach. First, despite whatever deadlines are written into state law, they may not be followed in practice. (Again, remember what happened in Florida in 2000 with respect to the deadlines for the initial "protest" phase of that dispute.) Second, while many states specify certain filing deadlines for various stages of a contest, most do not require their courts to resolve the contests by a specific date. Therefore, it is unclear that a Democracy Index could develop a meaningful comparison among states in this regard—unless, of course, it is valuable to know that virtually all states receive a "failing score" on this metric.

The Special Importance of the Date for Taking Office

For these reasons and others, perhaps it would not be especially worthwhile for a Democracy Index to attempt to measure the average length of litigated election contests in each state. Moreover, arguably, it does not matter how long an election contest takes, just so long as it is completed before the winning candidate is supposed to take office (or the Safe Harbor Deadline in case of a presidential election). True, the winning candidate would like some time to transition into office, but in a contested election where both sides are claiming victory, both sides can undertake transition efforts—with the certified winner understandably undertaking more of these efforts as the presumptive officeholder-elect.

Therefore, arguably, what the Democracy Index should attempt to measure is how often election contests within a state drag on past the date for taking office, which is an especially egregious breakdown of the election administration system. Because every day that the litigation continues past this date compounds the problem, this metric could build in some kind of multiplier effect for the number of days by which a state misses this crucial deadline.

But, again, because this kind of situation occurs very infrequently, how far back should a Democracy Index go in attempting to evaluate a state's performance in this regard? Does that the fact that Minnesota did not resolve its contested gubernatorial election of *1962* until March of the following year, over two months after Inauguration Day, matter in attempting to measure whether Minnesota would be capable of resolving a similar contest quickly in 2008? Thus, we circle back to wondering whether it would be better for a Democracy Index to attempt to measure the quality of a state's law "on the books" in this regard.

Maybe, as an incentive to states to avoid this kind of problem, what the sponsors of the Democracy Index should do (assuming the Index is implemented) is to announce that the past does not matter in this regard, only the future. All states start with the same perfect score in this regard, and only if in the future do they let a litigated contest draft on past the date for taking office would their score suffer—and suffer heavily. In other words, let's assume that the first year for implementing the Democracy Index is the elections of 2012. The Index might be structured so that only contests of elections in 2012 or later would be factored into this calculation. That kind of an announcement might be an incentive for states to restructure their contest procedures so that they avoid missing this deadline.

Measuring the Quality of the Judicial Rulings in Litigated Contests?

An additional thought to consider is whether a Democracy Index should attempt at all to evaluate how well courts handle the substance, or merits, of the election contests that come before them. This would seem to be an impossible task, as any such evaluation will be subjective. One might attempt to poll some kind of panel of experts, but even these assessments might be subjective and potentially accused of bias.

As an interesting alternative, one could keep track of the number of contests in which the state supreme court issues a divided decision, indicating that the judges themselves differed on the proper resolution of the case. One could also attempt to correlate this division with the partisan affiliation of the judges, in an effort to measure the extent to which judicial partisanship affecting judicial decisions. But this kind of exercise, it seems to me, would bog the Democracy Index down in complexity and controversy, and is a project better left to separate academic endeavor.

Election Code Audits

Finally, election contests are closely correlated with gaps and ambiguities in a state's election code (the rules for administering elections). It is these gaps and ambiguities that give lawyers something to fight about. Consequently, picking up on a suggestion in Cameron Quinn's mini-memo, one could consider whether a Democracy Index should attempt to measure the "quality" of a state's election code—"quality" in this case defined solely in terms of its relative lack of gaps and ambiguities. It is unclear to me, however, how one would score a state in this regard, except by measuring the amount of litigation caused by the gaps and ambiguities (but that is where we started).

Both Rick Hasen and I have suggested that states should engage in a practice of substantively "auditing" their election codes to identify and remedy such gaps and ambiguities. Perhaps a Democracy Index should somehow award states points if they conduct such audits.

Topic: Voter Satisfaction
Prepared for the Democracy Index Conference
Columbus Ohio, September 27-28, 2007
by
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Why does voter satisfaction matter?

Voter satisfaction represents a potentially promising measure to include within the Democracy Index. First, we might value voter satisfaction for purely intrinsic reasons. On this view, a well-run voting system ought to ensure that voters are satisfied with the service provided to them as they register and cast a ballot. Second, voter satisfaction may be a good proxy for assessing how well the voting system is being administered, as problems in election administration can and do affect voter satisfaction. A voter satisfaction survey could thus provide a useful reality check on state self-reporting, as states cannot "cook" these numbers. Third, voter satisfaction correlates with confidence in the election system. Voter confidence is, of course, important unto itself and something that may even affect voter turnout.[1] Finally, voter satisfaction surveys lend themselves to cross-state comparisons because they offer a standard metric for evaluation that does not depend on local practices (though results can be affected by the mix of voters within the state, as noted below).

There are, of course, potential problems associated with measuring voter satisfaction across jurisdictions. These include: (1) voter satisfaction can be affected by a number of outside influences, including partisan identification, voter demographics, media reports, and election results; (2) voter satisfaction surveys are quite costly to administer on a nationwide basis; and (3) research in this area remains in the early stages, so a number of important questions about the utility of these data remain unanswered. These and other problems are described in greater detail below.

How can we measure voter satisfaction?

Available data

To my knowledge, there is no readily extant database or readily available proxy one could use to assess voter satisfaction, particularly at the level of specificity that would be useful for states trying to improve their performance. Were this measure included within the Democracy Index, one would have to find a means of surveying voters directly in order to obtain this information.

Costs and benefits generally

[1] Given the close connection between confidence and satisfaction, I have folded in studies on voter confidence into my analysis.

There are some general challenges associated with assessing voter satisfaction. To begin, voter satisfaction seems to be correlated with partisan identification and demographic status. For instance, Republicans generally report greater confidence in the system than Democrats, and blacks are more likely than whites to think that the registration process is difficult or that their ballots will not be properly counted. These factors, like the other outside influences identified above, would have to be controlled for to ensure fair cross-state comparisons.

Further, there is a trade-off between the utility of the information provided in a survey and the costs involved in administering it. For instance, short surveys recording atmospheric impressions (*e.g.,* "how would you rate your voting experience") are easier and less costly to administer. But such surveys may be of limited use to states seeking to identify the source of their low ratings. One would thus require a slew of questions to identify precisely what problem – badly trained poll workers, long lines, a cumbersome registration process – led voters to be unhappy in the first place. A number of the surveys administered thus far have taken 10 to 15 minutes and, of course, longer surveys may result in higher drop-off rates and administrative costs.

Finally, because there are only a handful of people working in this area, research thus far has been quite limited and we do not yet have all the information we need to be fully confident in this measurement device. To begin, we do not know exactly how much cross-state variation exists or precisely how sensitive voter attitudes are to state-level differences in administrative policies. It is thus difficult to evaluate whether a cross-state comparison will tell us enough about variation in state administrative practices to justify the cost. Nonetheless, extant studies are quite suggestive. For instance, studies suggest that registration policies, voting technology, time spent in line, and poll worker interactions influence voter confidence.

Further, it is not yet clear how manipulable voter satisfaction is. As noted above, one of the benefits associated with voter satisfaction surveys is that they don't depend on state self-reporting and thus provide a useful "reality check" on the numbers the states provide. But we do not yet have much information as to whether voter satisfaction can be manipulated in a different sense – that is, whether states could increase their standing by adopting policies that have little to do with an objectively well-run election system. To offer a silly example, imagine that voters will report themselves highly satisfied with any election process that gives them a free candy bar at the end. More seriously, given that voter satisfaction is influenced by media coverage, it may be that states with a good PR system will be ranked more highly than states without one. Similarly, because voters tend to be more comfortable with low-level voting technology, states with outdated technology might obtain a voter satisfaction ranking higher than they might objectively deserve. Unless our only concern in designing the Democracy Index is *solely* the correlation between voter satisfaction and voter confidence, it would be useful to know how vulnerable this measure is to manipulation.

Costs and benefits of particular survey instruments

Voter satisfaction can be measured directly through a variety of polling instruments. These include exit polls, "customer service" cards handed out at the polling place, and phone/mail/internet surveys. Each method has a distinct set of cost and benefits.

Exit polls, for instance, represent an attractive strategy for surveying voters. First, they are administered immediately after the voter has cast a ballot and thus help ensure the survey accurately captures a voter's experience. Second, they help eliminate extraneous influences on voter satisfaction that fall outside the ambit of the Democracy Index. For example, voters can be influenced both by media reports about election problems and by election results (voters whose preferred candidate lost in the election tend to be less satisfied with the system). A state's ranking on the Democracy Index, of course, should not be influenced by the vagaries of media reporting or voter dissatisfaction with the results of a race. The exit poll, while still imperfect, is less likely to be influenced by these phenomena than a post-election phone survey, for instance.

Exit polling is not a perfect survey instrument, however. For example, exit polling can be extremely costly, especially as one might need to ask voters a number of questions about their experiences to ensure an accurate survey. Further, exit polls will not capture the experiences of all voters (for instance, it obviously excludes absentee voters). Exit polls similarly cannot capture the confidence/satisfaction of those who chose not to vote.

Another possible strategy for surveying voters at the time they cast their ballot is to provide voters "customer survey" cards when they cast their ballot. Customer survey cards may offer many of the same benefits associated with exit polls at a lower cost, and they might be used to reach at least some voters who cannot be reached via the exit poll (e.g., one might ask absentee voters to fill them out). Because customer survey cards require affirmative efforts by voters, however, it may be more difficult to obtain a representative survey, thus necessitating additional efforts to supplement the survey.

Phone, mail, and internet surveys similarly represent viable means for assessing voter satisfaction. Because these surveys are administered later than exit polls and voter survey cards, they are more vulnerable to some of the extraneous influences described above. But they can obviously do a better job of reaching voters who do not cast a ballot on election day and may be a more cost effective means for surveying voters. Cost is nonetheless a factor here as well, with RDD surveys being particularly expensive.

Obstacles and solutions

Several of the problems described above are likely to be surmountable. For instance, one could presumably control for the effects of election outcomes or partisan affiliation, just as one could use statistical adjustment techniques to ensure a representative sample. Similarly, one could deploy a variety of survey instruments to ensure a fully representative sample of voter attitudes.

Setting aside the questions on which there is little data – how much cross-state variation exists, whether voter satisfaction can be manipulated using policies that have little to do with a well-run election system – the most serious obstacle to use of this measure is likely to be cost. I was unable to pin down any precise numbers, but it is not difficult to imagine why such surveys would be costly to administer.

Comparative assessment

Whether voter satisfaction surveys offer a comparative advantage over other "general" measures will depend in large part on one's purpose in deploying them. To the extent that one values voter confidence in the system or simply good "customer service," voter satisfaction surveys provide an important measure that might be difficult to reproduce in any other form. Indeed, extant studies have already raised a number of important questions about the relationship between a pleasant voting experience and voter confidence in the system. To the extent that one is looking for a "reality check" on information reported by the state, early studies suggest that voter satisfaction surveys might provide a useful means of assessing otherwise difficult-to-measure questions – *e.g.*, whether ballots were confusing, whether lines were discouragingly long, whether poll workers were well trained and professional. For other types of issues, however, conventional auditing strategies may provide a more precise, cost-effective, and perhaps more dependable means of policing state self-reporting.

Peer Assessment

John C. Fortier
Timothy J. Ryan

American Enterprise Institute

This conference examines how one might create a democracy index to rate state election administration. Broadly speaking, there are several types of measures that might go into an index. For instance, one could focus on inputs: measures of the resources states allocate to elections, e.g., the amount of money spent or the number of poll workers per voter. Alternatively, one could focus on outputs, performance-oriented metrics such as the number of spoilt ballots or the average time a voter waited in line to cast a vote.

Another distinction must be drawn between objective and subjective measures. Objective criteria, such as voter turnout, are advantageous in that they are transparent and easy to compare. Unfortunately, it may not be possible to gather objective data that can fairly and accurately measure the broad spectrum of characteristics that speak to election quality. If we determine objective measures to be insufficient to a functional index, a partial remedy might be found in the inclusion of subjective measures, such as an assessment of voting systems by peers or experts.

Examples of Peer Assessments

- *U.S. News and World Report* Undergraduate College Rankings: 25% of the each college's score is based on assessments given by administrators at peer institutions. These administrators rate college reputations on a scale from one to five.

- *U.S. News and World Report* Survey of Hospitals and Doctors: In ranking hospitals, the magazine randomly selects a sample of physicians in each of twelve specialties. The physicians are then asked to select up to five hospitals in their specialty that provide the best care to patients with serious conditions, regardless of location or expense. Rather than tabulating an average score for each hospital, *U.S. News* identifies the hospitals that are most often cited for excellence in each specialization.

- Syracuse University Government Performance Project – A panel of experts rates the performance of state government administration practices using letter grades. For each state, the group also provides a detailed written explanation of how they arrived at their score. Although the evaluation criteria are in many cases nebulous, the written reports provide specific justifications for each score and imply benchmarks for improvement.

Peer Assessment Advantages

Perhaps a functional democracy index could rely on only objective output measures of elections. The advantages of objective data are numerous. Most obvious, they are transparent and easy to compare.

However, the diversity of state election practices may limit the quality of the picture that can be drawn using only objective measures. For example, the percentage of provisional votes cast or counted might be useful information, but some states replace provisional ballots with election day registration. Second, states have thus far been extremely inconsistent in their collection and reporting of election-related data. For example, some states include only active voters in their registration lists while others might include all voters. Moreover, some states do not report certain data at all. Third, while the output data might be useful as part of an index, they may miss or underrepresent certain intangibles.

Peer assessments might be able to mitigate some of these shortcomings. They could provide standardized output easy comparable across the whole country. While the methods or preconceptions of the assessors may differ, at the end of the process, each assessor could produce a number or a ranking that is in the same format as the other assessors.

Peer assessments might also fill in gaps in the output data to provide a fuller picture of election administration. For example, it may be that there are not enough measures to adequately reflect how well states are administering their registration databases. A peer assessment of the databases themselves or a general peer assessment that might include the databases could help to fill in those gaps.

We define the term "peer" broadly. In its purest sense, a peer assessment of a state's election administration would be performed by other state administrators. Other senses of the term might include local administrators or experts on election administration in the evaluation scheme. Not included under the term "peer assessment" are surveys of public opinion about election administration. While of general interest, we are skeptical of the notion that the general public can furnish useful evaluations of election administration.

Peer Assessment Disadvantages

Perhaps the biggest "question mark" with regard to peer assessment is who holds the time and expertise that would be necessary to create useful measures. State election officials may be reluctant to provide assessments of other states. Indeed they may not even be aware of other states' practices. Some might point to pre-existing cliques – real or imagined – that skew the evaluations. Given the diversity of election practices in the states, safeguards would be necessary to ensure that the peer assessments were not arbitrary.

Alternatives for Possible Measures

-A simple survey sent to relevant administrators in state election offices with either (a) a single assessment of other states' performance or (b) multiple assessments in broad areas of election administration (e.g., registration, counting votes, etc.)
-A broad survey of local election officials with either a single assessment or on multiple measures
-An assessment by a panel of experts with a single assessment of state performance.
-Assessment by several panels of experts in areas of their expertise. For example, a panel of computer experts could rate the states' statewide computerized registration databases.

Discussion

State and local administrators will likely resist participating in a rating system. To the extent that local administrators are surveyed, they are unlikely to know the practices of other states. More promising is the possibility of expert panels.

The great disadvantage of peer review is that it moves away from the transparency of objective measures. The advantages, however, are many. First, other types of data are hard to collect. Expert panels could be assembled with certainty that they will provide information that will go into the index. Second, an expert panel (possibly made up of former secretaries of state or former election officials) could be provided with information on all states and asked to make an assessment. A simple survey of sitting secretaries of state might rely more on general impressions. Third, some aspects of election administration are specialized or technical. Panels of experts could be assembled to deal with each area.

Peer assessment's lack of transparency might, to an extent, be addressed by taking a cue from the Syracuse University Government Performance Project. While the GPP's rubric for evaluation is nebulous, the expert panels it employs justify their grades in helpful written reports that point to specific strengths, weaknesses, and areas that might be improved.

In a perfect world, a democracy index could be built entirely on data that are readily available and widely accepted as valid. Failing this, a subjective assessment might provide a catch-all measure to account for intangibles, even out inconsistencies, and thereby fortify this very good idea.

Mini Memo: Local Variation and Inconsistencies

Bruce Cain & Karin MacDonald

The sub-topic 'local variation and inconsistencies' is in many respects one of the more important ones to include in a democracy index. It is over-arching and affects one of the fundamental aspects of democracy: one that tries to achieve equity in treatments and processes. This is also a topic that is extremely difficult to assess quantitatively, because the variation is so great on all variables that it is hard to keep anything constant.

The Help America Vote Act attempted to introduce some measures of uniformity into election administration processes throughout the U.S., by shifting responsibility that was previously held at the local levels, to the states. While this seemed to make logical sense, these measures faced an up-hill battle immediately in light of the fact that many local election administrators (LEOs) are elected, constitutional officers, just like many of the states' chief election officers. These elected LEOs are accountable to their constituents, and what they feel is best for their jurisdiction is often in direct conflict with what is best for the state as a whole. Thus, an interesting dynamic between the state and local levels began to develop, with state level election administrators trying to bargain and coerce local election administrators into complying with new regulations, and supplying data that the state was charged with collecting. We continue to see some of these issues play out in the realm of voting technology.

Local variation begins with the Registrar of Voters, County Clerk, or other chief election official(s) of a given jurisdiction. In most places, there is one person at the helm, either elected or appointed by the county board of supervisors or equivalent, in others, a group of commissioners that are appointed by varying elected officials, depending on the jurisdiction. Commissions often hire a director, who is more or less autonomous in the day-to-day activities of the office. In some states, there are two commissions on the local level: one responsible for registration and one for elections. Some jurisdictions have working commissions, i.e. the appointed commissioners serve as staff of the elections department.

Many local election administrators hold multiple positions. A typical combination is that of registrar of voters and county clerk, however, there is also the tax assessor, recorder and county clerk combo, and, no doubt, many others as well. An example of what one county's website says about the job of county clerk/recorder follows:

"The Contra Costa County Clerk-Recorder serves as custodian of public records and recorder of real property documents for Contra Costa County; issues and registers marriage licenses, notaries public, vital statistics, fictitious business names and other public documents. Our mission is to provide this service with the highest level of courtesy, accuracy, respect and efficiency."

Interestingly, there is no mention of elections, even though the county clerk is the head of elections of this jurisdiction, and furthermore, elections probably take up the majority of the office holder's time.

It is obvious that an applicant to the position of assessor, recorder, county clerk may not be an expert in all areas the job description entails. A candidate running for election to become the chief election officer of a local jurisdiction may not have any experience aside from having filled out a registration form at some point! And in the case of commissions, the appointments are often purely political, even to working commissions.

Thus, we are not surprised that there are incredible differences among local election administrators' backgrounds, and preparedness to manage complex election related tasks. While some local jurisdictions have attempted to hire chiefs of elections that have experience in the field, others have opted to find managers with more general experience in their jurisdictions, but not in elections. One county, for example, appointed an executive level administrator who was known as a 'fixer' and had previously headed the formerly troubled animal services division; another county recently appointed the county's chief technology officer to serve as registrar of voters.

In larger, better funded jurisdictions, an inexperienced chief of elections may be able to hire or rely on more experienced staff, however, it is important to note that there are hundreds of jurisdictions that have a staff of two to handle all the jobs outlined above. Stating the obvious: different input will often result in different output, i.e. voters may have a completely different experience accessing the election system depending on how their jurisdiction is managed, staffed and funded!

Local inconsistencies can be found among and within local elections departments. One example for this comes from our research on poll worker training. We conducted observations of multiple trainings for each election in 26 different jurisdictions, collected training and reference materials, interviewed administrative and training staff and surveyed poll workers. We found that many counties necessarily used multiple trainers to educate their poll workers. Trainers' experience in elections varied greatly and could range in the same county from no previous experience, i.e. having been hired via a temp agency – having attended county elections department training for poll worker trainers; to having many years of election department experience. What varied even more was the background of the trainers which ranged from being a professional comedian or actor to a corporate trainer, with everything else in between. Some counties also used staff supplied by voting technology vendors, many of which had very recently been hired from temp agencies and had not undergone rigorous training in procedures.
Within the counties, we found vast differences in the length of trainings, the way in which they were conducted (interactive/questions allowed/how in-depth topics were covered, etc), class sizes and what was covered.

In addition to the above scenario, poll workers are not screened, tested or evaluated in most counties, before or after they work. This means that there are no controls of who staffs polling places on Election Day. Depending on their demographics, poll workers

are also more or less able to absorb and understand the many rules, regulations and procedures they are taught in trainings, and then transfer the theory to practice on Election Day. Again it is not surprising that there are inconsistencies in the applications of laws, the experiences that voters have on Election Day, and the information that is made available. In our participant observations (i.e. working as poll workers, roving inspectors, technology troubleshooters, etc.) we have documented various instances of poll workers arguing about how to apply a procedure, which form to use, or how to process a voter, in the polling place in front of the voters. In each instance, poll workers had attended different trainings for that election. In one case, the roving inspector arrived and overruled both poll workers by making a third decision (a wrong one!). Inconsistencies on the street level can lead to massive voter confusion and more generally to mistrust in whether elections are conducted properly and in the election system as a whole.

What matters most and how do we measure it?

In a perfect world, there would be uniformity in procedures. Voters should be able to expect the same level of access, professional treatment, and application of rules in every jurisdiction. There should be equity in treatment. All election administrators should have a minimum level of professional training from an accredited program, and mandatory continuing education provided by the chief state election administrator. Training should be standardized, and poll workers should be tested for aptitude and their work evaluated.

This memo raised a number of different potential research topics for which data could be collected. Please also see the memo on 'Timely processing of registrations' for additional issues with variation and inconsistency. To establish a benchmark on who runs elections in the various local jurisdictions, data could be collected on job descriptions and minimum requirements for candidates to be eligible to run for office. Furthermore, resumes or job application records may be collected via the internet or FOIA requests. A rigorous evaluation of currently existing state and national continuing education classes and certification programs for election administrators would provide a wealth of information. Research could assess the topics that election administrators have delineated as most important, information about who takes the courses, whether the classes are mandatory or voluntary, how well and by whom they are designed, and who teaches them.

Within states, forms and administrative implementation memos or directives could be collected from all jurisdictions. Those could be evaluated via a 'variation index' (a sub-section to the democracy index). Data on poll workers could be collected by continuing the research we have conducted at the Election Administration Research Center on a broader scale. Poll worker demographics could be collected asking them to fill out surveys prior to poll worker training. Poll workers could also be tested for minimum standards prior to being allowed to participate in training, and after training for their learned skills. Additionally, poll workers should be evaluated in the polling place on

various criteria, including knowledge of procedures, courtesy to voters, and willingness to assist them. They could evaluate each other and a 'roving inspector' or equivalent could supplement this rating. Exit polls of voters would also be useful in this endeavor.

All of the above only make sense if someone actually plans on doing something productive with the data collected; i.e. if many poll workers in the aptitude test fail the basic math question, the local election administrator has to be willing to dismiss them rather than waive the requirement to pass the test. There seems to be a lot of data collection for data collection's sake in the field of election administration. Without a plan and the political will (in many instances) to use the data to improve the administration of elections, the above will simply create more busy work.

Our suggestion is that these data should be used to form measures of variability to make comparisons across areas and jurisdictions. In the interest of feasibility, the measures should be based on a sample as opposed to the population of polling areas. Using these measures, the goal would be to develop practical standards in the amount and unbiased-ness of the variability. We are concerned about bias associated with race, ethnicity, SES or place. Variability will likely never be reduced to zero, but could be reduced to some small, possibly acceptable, amount.

The Devil's (Advocate) is in the Details: Challenges to Collecting a Scientifically Valid Democracy Index[1]

Memo Prepared for the Democracy Index Conference
Columbus, Ohio. Sept 28-29, 2007

Paul Gronke, Reed College and
The Early Voting Information Center

A Democracy Index that meets scientific standards as a valid and reliable indicator of the quality of election administration must:

- Rely on a subject or respondent pool who are willing (and ideally enthusiastic about) participating.
- Use commonly agreed upon categories and definitions for key concepts.
- Develop indicators and indices that are valid over diverse jurisdictions and remain valid over a number of election cycles.
- Rely on a data collection instrument or set of data collection procedures that have been subjected to pilot testing.
- Employ appropriate statistical methodology to analyze the index so that spatial and over-time variability that may be due to, for example, demographic variation is not incorrectly attributed to variations in election laws or administrative procedures.

These data collection issues are generic, but they are made substantially more complicated for the Democracy Index because of America's radically decentralized institutions of election administration; widely disparate levels of expertise among the "street level" bureaucrats who actually conduct elections and would be the source of much of the Democracy Index's key data items; and the concomitant low quality data available from many jurisdictions.

This memo argues that the "Democracy Index" project faces fewer issues in theory than it does in practice, and that much of the discussion of the Democracy Index must focus on questions of implementation. In short, the project managers must give sufficient time and energy to issues of reliability and validity; measurement, and pilot testing.

[1] I am indebted to many individuals who have helped me cement the ideas contained in this document. Most importantly, I would like to thank Karen Lynn-Dyson of the Election Assistance Commission, and the commissioners of the EAC, who have supported and encouraged me to reflect upon my experiences working with the 2006 Election Administration and Election Day Survey. I have benefited tremendously from the wisdom and experience of Kimball Brace of Election Data Systems, Inc. and Clark Benson of PoliData. Finally Michael McDonald of GMU—who warned me that I'd spend many hours frustrated with the quality of the data provided by some states and localities—has been a regular source of advice and guidance. Finally, I want to acknowledge Geri Mannion and the Carnegie Corporation of New York who funded part of my work. Responsibility for all content and interpretations lie with the author.

The evidence for the memo is drawn from experiences working with the 2004 Election Day Survey and the 2006 Election Administration and Election Day Survey, both conducted by the Election Assistance Commission.[2] These surveys are mandated by Congress,[3] and presumably Congress could provide the EAC some sort of enforcement power and financial resources to make sure that states respond to the survey. As it stands, non-response is such a problem with some portions of the survey that is nearly impossible to monitor compliance with NVRA, UOCAVA, and likely other essential components of our constellation of laws that protect voting rights.[4]

Issue #1 - Information Sources
Who will provide the information?

The Democracy Index must collect its information from somewhere—presumably, websites maintained by state, county, and local jurisdictions. The problem is that the key stakeholders for the officials who maintain these sites are other elected officials, candidates for office, political parties, and get out the vote organizations in their states.

It is not at all clear the kind of information necessary for the Democracy Index is or will be made available. What incentive would these officials have to participate in a data collection effort that will inevitably make some of them look bad—after all, not everyone can be first, on the democracy index; someone is going to have to be last.

Furthermore, state and local election officials are already balking at HAVA and the mandated requirements of the EAC to collect election administration information. It is not clear why the Democracy Index would not be viewed as a well-intentioned by ultimately costly data collection initiative that will only place elections officials under additional scrutiny.

<u>The EAC Experience:</u>

1. One state and two territories did not respond at all to the NVRA portions of the 2006 EAC survey.[5]

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[2] The information contained in this memo is publicly available in "The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office, 2005-2006" (June 30, 2007) and "The Uniformed and Overseas Citizen Absentee Voters Act UOCAVA: US Election Assistance Commission Survey Report Findings" (September 2007), both released by the EAC.

[3] For example, HAVA Section 703(a) amended section 102 of UOCAVA by adding a data reporting requirement: "Not later than 90 days after the … election … each state and unit of local government shall … submit a report to the EAC … on the combined number of absentee ballots transmitted to absent uniformed services voters and overseas voters for the election…"

[4] My work with the 2004 survey was supported by the Carnegie Corporation of New York. I am one of three contractors working with the EAC on the 2006 survey, preparing reports for public release.

[5] One additional state provided no information for this section of the survey because it was exempt from the NVRA. However, this meant we could make not statements about the number of registered voters, number of inactive voters, etc.

2. Data collection was extended more than four months beyond the original target date (which was three and a half months after the November election), yet there remains major sections with incomplete or missing data.
3. Many states provided incomplete information. Only 45 states and 2 territories reported the total number of voter registration applications received from 2004-2006. In those 45 states, data was provided for only 65% of the jurisdictions.
4. Response rates on key items in the UOCAVA portion of the survey ranged from a high of 65% to a low of 41%.

Issue #2: Data Prioritization
What will you ask them to provide?

In social science jargon, operationalization is the process whereby we move from a theoretical construct to actual measurement. The move from theory to measurement is simple in some cases, such as *education.* By *education*, we generally mean the amount of time an individual has spent in educational institutions, and it is usually operationalized as *years of education.*[6]

Consider another seemingly simple case: *voter turnout.* Perhaps shocking to some, we still do not know how many voters turned out in 2004. 900 counties in the United States (almost one-third of the nation) do not report voter turnout to be the number of people who showed up at the polls, but instead report the number of votes for the highest office on the ballot.

Michael McDonald has shown that an incorrectly calculated voter turnout figure can fundamentally change our interpretation of the trends in voter turnout in the United States over the past quarter century. The numerator may include "the number of voters who showed up at the polls in 2006" or "the number of voters for the highest office". The denominator may include "the total number of citizens", "the total number of citizens over 18", "the total number of citizens who are eligible to register to vote," or "the total number of citizens who are actually registered to vote."

The problem faced by the Democracy Index is twofold. First, it must not only pay close attention to issues of operationalization for its own purposes, but the terms used must be understood in same way by hundreds if not thousands of elections officials around the country. Past experience with the NVRA and UOCAVA indicate that this could be a significant barrier.

Second, the measures must be practicable: they must be quantities that can actually be collected from the states. This will require important attention to prioritization, not asking just what data do you want to collect, but what data can you collect. Past experience with the NVRA and UOCAVA demonstrate that even though HAVA

[6] These seem straightforward, but note that we really would like to know *how much did an individual lean* in those years. For some of our students, lots of hours of classroom exposure seems to translate into very little learning! This is why we give tests and we don't rely on attendance as our measurement of learning.

mandates certain election information be collected, many states are ignoring the mandate. And even if the data are there, it may be stored in such a fashion that it is nearly impossible to produce the desired information.

The EAC Experience:

1. Problems with inconsistent definitions:

    a. Active and Inactive Voter Registration: There is no consistent rule applied across the states, or even across counties within a single state, as to whether "reported registration" numbers should include or exclude inactive" voters. This makes it difficult to produce any cross-state comparable measure of the percent registered or percent turnout.

    In a few states, the reporting method actually changed from 2004 to 2006, resulting in what appears to be a massive decline in registration, but is in reality simply a different definition of a registered voter.

    b. Balloting modes: There is no common understanding of the meaning of "early in-person" or "absentee" balloting. Some states report as "early in person" ballots ones that were cast by filling out an absentee ballot in person at an election jurisdiction, while other states lump these in with "absentee" ballots.

    c. Early votes: Some states, because they physically count ballots on election day, consider *all* ballots as cast on election day. Other states adopt precisely the opposite definition, reporting all absentee ballots as "early" even if the ballots were physically filled out on election day.

2. Asking for data that is not being collected

    a. The most common reason provided as to why a state or jurisdiction did not answer a question in the NVRA was "We do not collect this information." Only 34 states reported how many voters were removed from the voter rolls because they moved from the jurisdiction, and only 33 states reported whether voters were removed from the rolls because of felony convictions. Both pieces of information are supposed to be collected under Federal law.

    b. The EAC asked for, but seven states reported that they do not track, how many ballots are cast separate from the number of ballots that were counted.

    c. The EAC asked for, but many states did not track, the reasons why an absentee ballot was rejected (e.g. missing signature, missing postmark,

arrived late, returned as undeliverable).

d. Some states and local jurisdictions do not separate out UOCAVA ballots from absentee ballots, as required by UOCAVA.

Issue #3: Data Collection and Input
Who will enter the data and how will it be entered?

The next consideration is fundamentally practical. Let's assume the first two issues have been resolved—the project obtains buy-in from state and local officials and settles upon a common set of categories, definitions, and measurements. How will the data actually be collected?

The first question to ask is whether the instrument is designed for data entry and data reporting or whether it is designed as sample survey?

If it is a data reporting instrument, that the principal investigators need to do everything possible to make it easy for information that is already being collected by the states (e.g. in their statewide voter registration database) to be entered into the system. If it is a survey that does not aspire to comprehensive coverage for each election, but instead randomly samples precincts at each election, then the whole data collection task is very different.

The second question to be asked is: who will enter the information?

To the degree that it is possible, all data entry should be managed by the Democracy Index staff. The Democracy Index faces an almost insurmountable challenge if it plans to rely on state and local officials to fill out a data entry form or survey. By relying on graduate or undergraduate research assistants who will input the data, at least the Index can be assured that the "respondent" understands what is being asked for and how the "survey logic" operates. If the project intends to rely on state and local officials, I think the practical hurdles in the way of a successful effort are insurmountable. If the EAC can't do it with the power of Congress behind them, how can the Democracy Index?

The third point is not a question but simply a plea: the data collection instrument must be piloted or tested in a real-world setting.

The EAC Experience:

The 2006 EAC survey relied on a web-based data collection instrument; state and local officials were asked to enter their own data. The survey was presented multiple times to state and local officials, but an official "pilot" test does not seem to have been run. Some protections that, in hindsight, should have been built into the system were not, and as a result, some inconsistent, improbable, and impossible responses were collected. Many of the problems listed below may have been identified in a pilot run while others could

have been avoided if careful programming logic had been used in the data collection system.

1. Discrepancies were found between information that many states report in its official election compilations and the information provided in the survey. This is most apparent in discrepancies between "reported registration" and "registration: survey response" in the NVRA report.

2. Even though they were told multiple times, as well as reminded on the data entry screen, many officials did not understand the difference between a "blank", a "zero", and "We do not collect this information" This created great difficulties in tracking response rates and determining the total numbers of voters that fell into some categories.

3. Even though a web-based instrument was provided, many states chose to send spreadsheets or other formatted data back to the EAC, necessitating expensive ad time-consuming data entry.

4. Programming logic should have disallowed illegal survey responses but did not. For example, seven states allow same day registration, but far more than seven states put a number in a response category "Number of same day registrations."

5. When states or jurisdictions did not collect the right information, they tended to rely on "catch all" categories. For example, in the UOCAVA portion of the study, a number of states reported all UOCAVA votes were "uncategorized."

Using Surveys to Measure the Quality of the Electoral Process

Charles Stewart III
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"Mini-Memo" Prepared for the Democracy Index Conference
September 28 – 29, 2007

This memo discusses issues related to the use of surveys to assess the quality of the electoral process, especially at the state level. Some of the material is taken from a proposal to the Pew Charitable Trusts to fund a 2008 Survey on the Performance of American Elections,[1] which has received preliminary approval.

* * *

The fallout from the 2000 presidential election sparked efforts to measure how well the formal elements of elections[2] function. The first measure of performance, the "residual vote," was convenient, informative, and useful, but limited. These limitations have led to other efforts to measure the functioning of the system, both its parts and its totality.

There are two general strategies available to use to develop these measures. The first is to put electoral data to uses for which they were not originally intended. The residual vote rate is a good example of this. It relies on election returns, which are intended to declare winners in elections, and turnout statistics, whose status has never been clearly defined, to measure "blank ballots" (as we call them in Massachusetts).

This approach has several advantages. The cost is very low, the measures often possess face validity, regular citizens can scrutinize the system with ease, and, since most people do not think of these as performance measures, they are relatively free from strategic manipulation by officials who want to look good. (This may be changing, unfortunately.) The main problem with using election returns and other statistics generated by election officials as they go about their jobs is that not all parts of the election system generate usable measures as byproducts.

The second strategy is to use the testimony of voters (or potential voters) about how well things went. Approaches here include press reports, "incident report" web sites, public opinion surveys, and poll observer studies. This strategy, likewise, has advantages and disadvantages. Relying on direct testimony means that one is not limited to studying only the data-rich parts of

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[1] Other investigators include Stephen Ansolabehere, Adam Berinsky, Andrea Campbell, and Gabriel Lenz (MIT), R. Michael Alvarez (Caltech) and Thad Hall (University of Utah). These remarks reflect my own thoughts and not necessarily those of my collaborators — though, one can hope.

[2] Small point: we need a good summary phrase to describe what we are interested in measuring the quality of. Terms like "elections" or "the electoral process" are overly broad, since they tend to encompass not only the formal elements of elections, but also the behavior of actors within those formal elements --- and sometimes external to those elements. The term "voting," on the other hand seems overly narrow. The term "democracy" is so overly broad as to be useless. Since we have been told we don't have to solve any of the problems we identify in these memos, I will be imprecise in my own use of many of these terms in this memo.

the system, nor is one constrained by the highly variable performance of thousands of election officials. On the other hand, it is expensive to ask individuals about their experiences, if it is done well. Developing and following systematic protocols (rather than relying on "samples of convenience") is typically outside the capabilities of regular citizens and time constraints of reporters. In enterprises such as mass survey research, we also must worry about the validity of measures and the accuracy of respondent recall, since we are measuring performance indirectly.

Any comprehensive effort to assess the quality of the electoral process must rely on a mixture of the two general approaches, since each has its strengths that, overall, are complementary. And, when the two approaches provide parallel measures of the same behavior, using multiple methods allows for cross-validation.

A proposed survey on the performance of American election

It is these observations that have inspired a group of us to propose a 2008 Survey on the Performance of American Elections to the Pew Charitable Trusts, as a first major effort at developing an ongoing national effort to measure election system performance independently of the system itself.

The justification for this survey begins with the 2001 report of the Caltech/MIT Voting Technology Project (VTP), which pointed out that elections are systems, that failures are possible (indeed, likely) at many points in the system, and that reform of elections must encompass the entire system (Caltech/MIT 2001). That report further noted that the focus of the controversy that aroused interest in the 2000 presidential election in Florida was only a tiny part of the problem with elections in the United States, and indeed, may not have been the most important problem. To make this point concrete, the 2001 VTP report estimated that up to six million votes were lost in the 2000 election, only 1.5 million of which were due to failures of voting machines. An equal number of votes were estimated to have been lost because of long lines, inconvenient hours, or poor polling place locations, and twice as many votes (over 3 million) were estimated to have been caused by registration problems.

To gain some specificity about the idea of elections as a system, consider the major processes that come together to form the election process. The major links in the chain include the following: (1) ensuring the voter is properly registered, (2) getting the voter to the correct polling place on Election Day, [3] (3) validating the voter and checking him/her in at the poll, (4) getting the voter the correct ballot, (5) navigating the ballot interface and using the voting technology, (6) properly counting the vote, and (7) accurately aggregating the counts from a series of machines and voting stations.

Despite the fact that only 25% of votes lost in 2000 were due to voting equipment problems, the only major metric that gauges the quality of the election process (the residual vote

[3] I make reference here to a single Election Day, although American elections are increasingly occurring during "election periods" that stretch weeks before Election Day, during which time early votes, absentee ballots, and vote-by-mail ballots are cast. For simplicity, this proposal continues to use the term Election Day, though we recognize it is increasingly anachronistic.

rate) focuses on the performance of voting machines. Nationwide metrics to help track the failures in the election process that account for the remaining 75% of lost votes in national elections have been slow to develop. As I understand it, the thinking associated with the Democracy Index Conference is devoted to remedying this problem.

Pioneering efforts to use exit polls in 2006 (in Colorado, New Mexico, and Ohio) represented important steps forward in trying to understand why the "other 75%" of lost votes occur (Atkeson and Saunders 2007; Hall 2007; Magleby, Monson, and Patterson 2007). These studies have demonstrated the viability of using random sampling techniques and survey instruments to assess the quality of the voting experience in localities, including those areas of election administration that do not involve voting machines per se.

If we are serious about improving the strength of each part of the election system, we must develop a series of accessible, easy-to-understand measures and a valid survey methodology that allow us to answer the following questions and to compare the answers across states (and even localities) and across time:

- How many voters appeared at precincts on Election Day, believing they were registered to vote, only to be told they did not appear on the registration rolls?
- How many voters appeared at the wrong precinct on Election Day?
- What was the average waiting time to check in at the precinct?
- How many voters were asked to show an identification card on Election Day in ways contrary to state and federal law?
- How many voters experienced difficulties in using the voting technology on Election Day?
- How confident were voters that their votes were counted as intended?

These are the most basic questions, and should be thought of as the core questions that can provide a quick-but-informative "temperature reading" of the election system's health. We can take each of these core questions and probe a bit further into the experience of voters with the election process.

In addition to these questions, which are essentially factual, we know little about what voters think about policy questions facing election reformers, or what choices voters would make in order to make the voting process work better. Such questions include whether all voters should be required to show a photo ID to vote, whether electronic machines should be required to produce "paper trails," and whether voters should be allowed to register on Election Day.

We are also interested in a set of subjective questions that nonetheless would help us assess how well Americans believe the franchise is being protected in the United States, such as how confident are voters that their votes will be counted as cast, how confident are they that the votes of others will be counted as cast and that the correct winner will be determined, and how confident are they that election officials have competently protected the different links in the voting chain?

Past and existing survey efforts

Considering that election reform has been a highly salient issue in the United States for nearly a decade, one might suppose that the questions posed in the previous section are already being probed through the existing array of academic and government surveys that study elections and voting. It would be over-stating it to claim that the issue of election reform has been *ignored* by these research efforts. However, the flagship government and academic surveys --- the Voter and Registration Supplement of the Current Population Survey, the National Election Studies, and the General Social Survey --- have largely ignored election reform. A few academic efforts have taken on the issue of election reform, but the sample sizes and the range of questions addressed has been limited, compared to the full scope of the election system that needs to be monitored.

Some academic efforts have been made to fill in the gaps left by the established major governmental and academic surveys. R. Michael Alvarez and Thad Hall (Alvarez, Hall, and Llewellyn 2006, 2007; Alvarez and Hall 2005; Hall and Alvarez 2004) have been able to put into the field a set of questions that gauge the confidence of American voters in the electoral process. This work has been able to establish, for instance, that there are partisan and demographic factors affecting the confidence voters place in the electoral process, and that voters are more-or-less confident in elections depending on the type of voting equipment they use. However, because of cost constraints the number of questions they have been able to ask about the electoral process has been seriously limited, along with the number of observations (averaging just over 1,000 respondents per survey).

The recent studies that have used exit polls to measure the quality of the voting experience have likewise been able to establish verifiable correlates with the quality of the electoral experience (Atkeson and Saunders 2007; Hall 2007; Magelby, Monson, and Patterson 2007). However, the success of these exit poll studies also demonstrate the difficulty of using exit polls to mount a comprehensive national effort to study progress in election reform, especially if we want to report results at the state level. Using exit polls for such a massive effort would be organizationally and financially impracticable on an ongoing basis.

The 2006 Cooperative Congressional Election Study reached a larger sample of respondents (roughly 30,000 voters) and was the first large national survey to include questions related to issues arising throughout the chain of voting. Among other questions, the common core within the CCES asked about whether the respondent was required to show picture identification at the polling place, how long the voter had to wait to vote, and whether the respondent encountered a registration problem. Among those required to show a picture ID and among those who encountered registration problems, respondents were asked if they were ultimately denied the opportunity to vote.

Even this limited set of questions has produced very interesting results that could help inform current policy debates by providing desperately needed facts about what people encounter when they vote. Major questions about the effectiveness of poll worker training are raised when it is discovered, for instance, that 47% of voters reported they were asked for a photo ID in order to vote, even though the requirement existed in only two states in 2006. (In Wisconsin, which

only follows the minimum HAVA requirement of asking for an ID from first-time voters who registered by mail, 25% of voters report being asked for a photo ID.) Nonetheless, concerns about the intimidation effect of ID requirements are mitigated somewhat when it is discovered that only 0.2% of those who were asked to show a photo ID were not allowed to vote.

The CCES provides a good jumping-off point for the design of the survey we propose, but even here, the number of questions asked about the voting experience was relatively limited. The CCES experience also underscores the importance of having a large national sample to help uncover problems that voters might face in casting a ballot. For instance, the percentage of voters who were denied a ballot after showing a picture ID was so small that the standard academic sample size of 1,000 respondents most likely would have turned up no one who had been denied access to the polls because of this requirement. The percentage who had to wait longer than half an hour to vote was only 4%; less than 1% had to wait longer than an hour. Again, standard sample sizes would have produced very small numbers of respondents, making comparisons across states impossible, not to mention statistical analysis that tried to understand *who* was affected, and to what effect.

Because the quality of election administration has not been the sole focus of a national survey of this sort, there are other methodological issues that remain to be addressed, which the 2008 efforts intends to study. One of these issues pertains to the mode of surveys, that is, whether the survey is performed via telephone, mail, Internet, or exit poll.

An important issue to keep in mind as surveys are used to measure the experience with the electoral process is that voters often misreport their experiences in predictable ways. For instance, they tend to over-report engaging in socially desirable behaviors, like voting. They tend to forget past experiences of all types quickly. And, they tend to be influenced by friends, acquaintances, and the mass media when they form memories about their past experiences and behaviors. All of these hazards caution against reifying the answers to survey questions pertaining to the electoral process.

The proposed effort

Let me briefly outline the survey effort we intend to pursue in November 2008. To prepare for that effort, we hope to administer two pilot surveys, in November 2007 (in Kentucky, Louisiana, and Mississippi) and February 2008 (in the "Super Duper Tuesday" states). The core of all these surveys will require state-based samples of potential voters. Because of cost constraints, these samples may be no larger than 100, though we hope to run samples of at least 250 in most cases. We have built into the design experiments where we will administer both Internet and telephone surveys in some states. Finally, because we are interested in developing a standard, minimal battery of questions that might be used regularly in the future, we have focused on the following candidate questions to ask:

1. Are you registered to vote?
    a. Follow-up: If not, why not?
2. Did you vote, or attempt to vote, in the general election?

   a. Follow-up: If not, why not?
   b. Follow-up: If you attempted to vote, where you ultimately successful in casting a ballot?
3. How did you vote in the general election (i.e., in a precinct on Election Day, at an early voting site, or by mail/absentee ballot)?
4. How difficult was it to find your voting place on Election Day?
5. Did you show up at the correct precinct when you went to vote?
   a. Follow-up: If not, were you accurately directed to the right precinct right away?]
6. Did you encounter registration problems when you went to vote?
   a. Follow-up: If so, were you eventually allowed to vote? If so, were you offered a provisional ballot?
7. How long did you have to wait in line to vote?
8. Were you required to show an identification card in order to vote?
9. On what kind of equipment did you vote?
10. Did you encounter any problems with the voting equipment that may have interfered with your ability to cast your vote as intended?
11. Did you receive help in filling out your ballot?
12. Overall, how easy was it for you to vote, once you had checked in and were in the voting booth?
13. How confident are you that your vote was counted as you intended it?

(Obviously, these are sketches of questions, not the actual questions themselves.)

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Chapter 1

Why Measurement Matters

Daniel C. Esty

Environmental decision-making has long been plagued by uncertainties and a lack of critical information. The data and analyses needed—by governments, companies, and individuals—for thoughtful and systematic action to minimize pollution harms and to optimize the use of natural resources are often unavailable or seem too costly to obtain. As a result, choices are made on the basis of generalized observations and best guesses, or worse yet, rhetoric and emotion. We stand, however, on the verge of an opportunity to transform our approach to pollution control and natural resource management through deployment of digital technologies in support of a more careful, quantitative, empirically grounded, and systematic environmentalism. This volume explores how better data and greater emphasis on statistical analysis might strengthen environmental problem solving in the policy and corporate worlds.

At the center of this potential revolution in the environmental arena lies a commitment to performance measurement and data-driven decision-making. It has long been understood that better analytic underpinnings generate better environmental outcomes. Information has a cost, however, so there are limits to how much investment in environmental data and knowledge makes sense. In an ideal world, environmental decisions would be made on the basis of many factors, including levels of emissions from every relevant pollution source, who and what is being affected, how much ecological or epidemiological harm each "receptor" is suffering, how much value to place on these injuries, what options exist for mitigating the harms, and the costs and benefits of the alternative harm-reducing interventions available. But, historically, gathering and analyzing all this information has come at a very high price. Therefore trade-offs are made to reduce "administrative" costs, even at the expense of imprecision in environmental policy or actions.[1]

Some elements of the decision process are inescapably matters of judgment or values, making a purely quantitative decision process not just impossible but unwise (Sagoff, 1982; Wagner, 1995). But the inappropriateness of rigid numerical algorithms does nothing to diminish the value of more data and analysis as a decision tool. Indeed, narrowing the reducible zone of technical uncertainty would be of enormous value in the environmental domain (Esty, 1999). In addition, over the last few years, collecting, storing, tabulating, dissecting, and sharing information—including data on key environmental parameters—has become dramatically easier and cheaper as a result of advances in computer and telecommunications technologies (McRae, 1996). As the cost of gathering information falls, data-intensive, fine-grained analysis becomes relatively more cost-effective and sensible. *Environmental Performance Measurement* builds on this Information Age opportunity and explains how a shift toward more analytically rigorous underpinnings can and should unfold in the environmental realm.

An emphasis on developing and tracking a core set of environmental "indicators" could restructure our understanding of environmental problems and redefine our thinking about which response strategies work and how best to deploy them. Specifically, broader access to better data on air and water quality, emissions levels, toxic and solid waste, and energy use, as well as stocks and flows of other critical natural resources, would make it easier to identify issues, spot trends, evaluate risks, set priorities, establish policy options, test solutions, target technology development, and refine policies. With a clearer picture of the environmental impacts for which they are responsible, nations, states, communities, corporations, factories and other facilities, and even households and individuals would be positioned to reconfigure their behavior to reduce the level of harm.

Not only does a more "measured" approach to environmental problem solving promise enhanced analysis and decision-making, it makes it possible to evaluate policy and program performance, track on-the-ground progress in addressing

pollution control and natural resource management challenges, and identify successful (and unsuccessful) efforts and approaches. As the pages that follow explain and the chapters in this volume demonstrate, data—particularly comparative data—facilitate performance benchmarking, support quantitative goal setting, and trigger competitive pressures to identify and implement environmental "best practices." In a world where environmental shortcomings are often a function of implementation deficiencies, a data-oriented approach to environmental action offers a new, harder-edged strategy for achieving better results.

To the extent that significant environmental shortcomings are a function not simply of "uninternalized externalities" but rather of waste and inefficiency, data-driven environmentalism provides a firmer foundation for improving resource productivity among both producers and consumers. Quantification also offers a basis for moving governments toward refined environmental programs and the use of more efficient policy instruments. A shift of emphasis toward information and data analysis thus represents, to some extent, a new environmental policy paradigm, emphasizing solutions to information failures rather than narrowly focusing on cost internalization.

Better Decision-Making

Reducing Uncertainty

Better data and information can help to address some of the most pervasive shortcomings in environmental decision-making. A central element of the environmental challenge is the fact that pollution and natural resource management problems are often hard to see and, therefore, easily overlooked or underestimated.[2] In some cases, such as automobile exhaust, the harm arises from numerous sources of emissions that are individually infinitesimally small but cumulatively very significant. Likewise, the impact of a single fisherman or fishing boat on fish stocks seems minute, but collectively, fishing fleets can deplete entire fisheries. Good data provide the perspective needed to see such aggregate effects and to spot "tragedies of the commons" in the making.

In other cases, emissions mix in ways that are difficult to sort out and make sense of. Air pollution in any major metropolitan area is a complex "soup" derived not only from millions of cars and trucks emitting particulates, oxides of nitrogen (NO_x), carbon monoxide, volatile organic chemicals (VOCs), and other by-products of combustion in their exhaust, but also releases from hundreds of thousands of households and tens of thousands of factories and other facilities discharging a range of toxics and other harmful substances. Sorting out responsibility for environmental damage across these many types and sources of harm can seem daunting. But sophisticated monitors, sensors, and data tracking systems can help to identify the separate "ingredients" and pollution sources.

In other circumstances, emissions spread spatially in ways that make analysis difficult. The effects of sulfur dioxide and other acid rain precursors spewed from coal-burning power plants, for instance, would be quite noticeable if concentrated. But tall smokestacks spread the emissions widely, making the harm hard to monitor and control. Data on downwind impacts (cases of respiratory distress, acidification of lakes, etc.) can help to sharpen the focus on such diffuse emissions. Perhaps the most difficult categories of pollutants are those that are dispersed not only across space but also over time. Greenhouse gas emissions, for example, persist in the atmosphere for as long as several centuries. The nearly impossible-to-observe buildup of these gases creates the risk of climate change. But numbers permit patterns to be spotted and trends to be traced. And with modern analytic techniques, such as regression analysis, correlations can be established, causal linkages identified, models built, and future effects forecast.

Simply put, data can make the invisible visible, the intangible tangible, and the complex manageable. The "realization" effect of numbers can be transformative. For example, while none of us can see the ozone layer, credible measurements of the thinning of this shield against the sun's ultraviolet rays convinced the public and politicians of the need for action (Benedick, 1991). Computer-supported data collection and analysis allows us to "see" many more environmental problems and to begin to disentangle the full range of risk factors implicated. Information Age gains in other fields (such as statistics, epidemiology, and meteorology) promise, moreover, to strengthen further our capacity to track ecological and public health threats and to identify how best to reduce these harms.

Perfect information, of course, will never be achieved. Significant environmental uncertainties are likely to persist for a long time to come. Some questions are inherently difficult to answer, and new problems are constantly emerging. Unintended consequences and countervailing risks constantly threaten to undermine environmental efforts (Graham and Wiener, 1995). Identifying all of the relevant variables and elements of a comprehensive analytic framework thus represents an enormous undertaking.

One must also remember that "environment" is not a narrow category or a single issue but rather a vast rubric covering an array of pollution control and natural resource management questions. Thus, environmental progress cannot be measured with reference to a small number of variables; it must be understood as a multidimensional concept demanding attention to a panoply of issues.

To add to the complexity, environmental decision-making involves a reducible but inescapable dimension of political judgment. Differences in values and assumptions can be diminished over time with good analysis and shared data, but

ultimate agreement on how much weight to put on various goals will never be achieved. Individuals and societies differ in how much value they place on a pretty view or a life saved, and policy judgments on these matters will evolve as countries develop (Esty, 1999). Richer countries can afford higher environmental standards than poor ones can. Fundamentally, the multicriteria nature of environmental goals ensures that pollution control and natural resource management decision-making can never be reduced to a narrowly numerical quantitative risk assessment.

Complexity will remain a hallmark of the environmental realm, but it can be managed. Computers, in particular, make complexity much easier to cope with, permitting much more information-rich and nuanced analytic processes. With better data and derivative knowledge, sloganeering and guesswork can be supplanted by a hard-nosed focus on key problems and the search for effective and efficient solutions. An enhanced information base thus promises to solidify the foundations of environmental decision-making, which have too often been shaky, leading to the entire policy domain being dismissed as "soft" (Esty and Porter, 2000).

Enhancing Comparative Analysis

Environmental decisions almost always turn on comparisons and trade-offs. Many choices require the decision maker to identify the costs and benefits of investments in pollution prevention or abatement, and decide whether the risk reduction to be obtained justifies the expenditure entailed. Are the public health gains from reducing arsenic in water worth the filtration and other control costs? Would a tighter standard for particulate emissions be justified by lower incidence of respiratory disease? Does it make sense to invest in a new smokestack scrubber or to switch from coal to natural gas to reduce SO_2 emissions? Numbers facilitate such analyses, and measurement of key parameters is therefore critical.

Comparative analysis also makes it possible to target environmental spending. With data on risks, their relative significance, and alternative ways of dealing with the most pressing issues, decision makers can set priorities and evaluate competing policy options. As funds for investment in pollution control and natural resource management inevitably are limited, efficient use of the available resources is essential to sound environmental management in every sphere.

Comparisons, furthermore, spur competition. And competition, in turn, unleashes innovation (Porter, 1990). Everyone loves rankings, and no one likes to be revealed as a lagging performer. Just as knowledge that a competitor in the marketplace has higher profits or faster-growing sales drives executives to redouble their efforts, evidence that others are outperforming one's country, community, or company on environmental criteria can sharpen the focus on opportunities for improved pollution control and resource use efficiencies.

Finding Points of Leverage

Beyond providing a snapshot of current circumstances and a basis for systematic environmental decision-making, data can be used to identify the "drivers" of environmental outcomes. With data that are relevant, valid, and reliable, statistical analysis permits the correlates of good performance to be identified.[3] Empirical evidence should be used much more widely by both governments and business as a foundation for their environmental decisions. As time series data become available, causal relationships will increasingly emerge, making it easier to identify the determinants of top-tier environmental performance at the policy and corporate levels. Esty and Porter demonstrate the potential in this regard in Chapter 3, providing a preliminary empirical analysis of the variables affecting national environmental policy success.

Such data-driven decision-making is firmly established in other fields. Corporations spend a great deal of time and money on accounting to get a vantage point on their various activities and to understand better the strengths and weaknesses of their business strategies. Numbers permit options—for capital expenditures, choices of product lines, marketing and advertising, etc.—to be analyzed methodically and results to be systematically tracked. Data also allow goals to be set based on both internal targets and comparisons (for example, derived from observed results within the company at other facilities or in other product lines) and with reference to external benchmarks, such as industry-wide financial returns. Investments that pay off are continued or augmented; those that do not are discontinued.

Numerical analyses thus permit a degree of clarity and specificity that cannot be achieved otherwise. Success or failure can be quantified. Decisions can be made on an objective basis. Verified comparative data not only allow companies to gauge their own performance but also enable those in the capital markets to make independent judgments about who is doing well.[4]

Empirically based decision-making is critical for another reason: intuition is often wrong. Robyn Dawes (2001) and others have demonstrated in a number of fields—from the diagnoses of emergency room doctors to the ability of parole officers to identify likely recidivists—that good statistical analysis beats "expert" judgment nearly every time. Cass Sunstein (2001) has similarly analyzed why people are prone to significant errors in making risk assessments, building on the work of Paul Slovic (2000) in understanding the limits of human cognition. It is becoming increasingly clear that intuition can "top up" data and analysis, but it cannot replace it. The advantages of quantification and statistical analysis are now recognized in many disciplines. It is high time that the same logic is brought to bear in the environmental realm.

Improved Performance

Measuring Progress

Greater emphasis on data also can help to make environmental decision-making more "output" rather than "input" oriented. Too often in the past, environmental performance has been assessed based on how much money has been spent or how many inspections have been completed—or, worse yet, how many laws or rules have been adopted. These input measures may or may not be indicative of progress. Actual environmental success can be judged only "on the ground" as a matter of reduced public health or ecological impacts. Results are what matters—improved air and water quality, reduced waste, and more sustainably managed natural resources.

In a world where good intentions are not enough and implementation is key, quantitative policy evaluation is essential. In business, not every new product sells. In government, not every program works. Finding the failing efforts is thus an important element of good environmental management. But historically, the environmental community has not been supportive of rigorous evaluation and the weeding out of unsuccessful policies, strategies, and approaches, perhaps fearful that negative reviews would result in lower overall environmental spending. A tough-minded environmentalist should insist on having all programs monitored continuously against empirically defined benchmarks—and on redeploying the resources of those initiatives that do not measure up.

Comparative data and a focus on output measurement can improve corporate environmental performance as well. Facility-by-facility results allow executives to track pollution control and resource management practices within their own companies. Such data can be used to identify top-tier performance, establish targets, and build programs to move all of a corporation's operations toward leading-edge standards. Industry-wide performance data provide another basis for goal setting. Results identified by international bodies or the scientific community can also generate guidelines for what environmental action is possible.

Similar opportunities are also available at the household level. Electric bills in most places, for example, show how much energy was consumed in the month before. They may even provide a comparison with the last few months' electricity use or with the same month last year. But they do not say how much an average household of comparable size in the same geographic locale consumes or, better yet, what the most energy-efficient families are able to achieve under similar circumstances. Such targets, practically determined and easily understood, would provide a real spur to action with society-wide potential for reduced pollution, especially in combination with information on *how* the top performers have been able to reduce their use of electricity.

Benchmarking and Best Practices

To the extent that many environmental efforts fall short in implementation, a more data-intensive approach to policy-making offers special opportunities. Measurement facilitates policy evaluation, performance comparisons, and identification of superior regulatory approaches. In fact, enormous environmental gains can be obtained simply by moving lagging jurisdictions toward the "best practices" of those with top-ranked results. Quantitative measures also provide a basis for judging which specific regulatory tools, technologies, or strategies are succeeding and which need to be rethought (Eccles et al., 2001).

The potential to use benchmarking to drive progress applies at many scales and across a diverse set of environmental issues and actors. Comparing results across environmental challenges (air versus water versus waste) and jurisdictions (California versus Texas versus Connecticut, or the United States versus France versus Germany) allows conspicuous achievements or difficulties to be spotlighted, facilitating movement toward better results over time. Moreover, in the Information Age, both benchmarking and dissemination of information on best practices, strategies, and technologies promises to become ever cheaper as computer and telecommunications technologies advance.

As the Environmental Sustainability Index (ESI) discussed in Chapter 2 makes clear, countries have much to gain by learning how they compare across the spectrum of pollution control and natural resource issues they manage on behalf of their citizens. Every country ranked in the ESI study lags its peer group (defined as those at a comparable level of development) on some issues. Spotting these opportunities for improvement, and having access to the information on what leading jurisdictions are doing, sharply clarifies the policy challenge. States and communities would benefit from the same opportunity to see how they rank against their counterparts and to have best practices illuminated.

The availability of information on how others are doing in reducing pollution and improving resource productivity tends to stimulate comparisons, benchmarking, and a push to improve performance in the corporate sector as well. While some critical information is kept confidential because of its strategic value or because it creates exposure vis-à-vis regulatory authorities, a great deal of data is now available. And the Internet puts the answers to many pollution control or natural resource management question just a few clicks away. It appears, moreover, that the competitive pressures are mounting. As Frank Dixon (Chapter 5) and Alois Flatz (Chapter 6) explain, financial analysts and others who track the capital markets have a growing appetite for information on corporate environmental results as an element to fold into

their forecasting of future corporate profitability. Such interest has sharpened the environmental focus of many businesses, triggering competition among companies to optimize their handling of pollution and natural resource challenges. Performance data and identification of best practices thus promote an action orientation and stronger environmental performance in several ways. First, clear numerical measures highlight what is possible, as a matter of fact, in improved environmental results. In many cases, governments, corporations, and households do not have a clear picture of what might be obtainable in pollution control or resource management gains. Data on the results others are achieving can help to clarify what constitutes an appropriate target or goal.

Second, benchmarking can be used to reveal best practices and to provide a road map for laggards to follow in moving to adopt better strategies, technologies, or policies. Modern telecommunications make dissemination of information on best practices much easier and cheaper. The excuses for continuing sub-par performance thus become ever more limited.

Third, as noted earlier, comparative data often stimulate competitive pressures and, therefore, innovation that can lead to improved results. The benefits of competition have been demonstrated repeatedly (Porter, 1990). Absent data and appropriate benchmarks from comparable jurisdictions, it is hard to spot lagging performance. Complacency and inertia are hard to overcome, but when citizens (or environmental groups or the media) find out that other cities, states, or countries are delivering much better environmental results than their own government, they have a basis for complaint. Indeed, Belgium's poor showing in the 2001 Environmental Sustainability Index (ranking 79th, just below Albania) caused a huge uproar in Brussels and has led to a significant focus on the country's pollution problems. The environmental facts before and after the publication of the ESI remained exactly the same. The ESI simply gave the Belgians (and especially the Belgian media) a context for understanding their pollution numbers and a benchmark for judging their government's relative performance.

Comparative information on government activities and results is also useful for business. It gives companies operating in jurisdictions with inefficient regulatory systems an independent (and not purely self-interested) basis on which to press for better government performance. The prospect of focused oversight by citizens, NGOs, the media, and the regulated community tends to induce better government performance. In particular, the presence of data and benchmarks from other jurisdictions can trigger a process of "regulatory competition" among governments that yields more effective and cost-conscious environmental controls (Esty and Geradin, 2001).

Better corporate-scale environmental data can generate a similar competitive dynamic. Numbers make vivid the fact that others are achieving superior environmental results. Just as environmental indicators pressure governmental authorities to sharpen their policies, so can comparative data drive lagging companies to improve their environmental performance.

Greater Efficiency

Many environmental problems arise from market and regulatory failures, but other issues can be traced to inefficiency and waste, reflecting ignorance or mistakes on the part of polluters and natural resource users. In fact, a significant percentage of pollution arises not from emissions intentionally sent up the smokestack or out the effluent pipe to avoid control costs (uninternalized externalities) but from materials or energy that are unwittingly underutilized in fabrication or elsewhere in a product's life cycle. Such "inadvertent" pollution can be traced to poorly designed goods, outdated technologies, unnecessarily wasteful packaging, and general inattention to the dictates of environmental management. Data on the losses attributable to such mistakes, as well as easy access to information about alternative production or consumption practices, promise to improve resource productivity, enhance consumer welfare, and improve corporate competitiveness (Porter and van der Linde, 1995; Esty and Porter, 1998). The U.S. Environmental Protection Agency's Toxic Release Inventory (TRI) highlights the potential in this regard. Merely being required to tabulate the amount of chemicals flowing out of a facility into the land, air, and water pushed many companies to adopt waste minimization programs (Karkannian, 2001).

Where excess emissions can be attributed to inefficiency, polluters generally can be induced to shift to less harmful production or consumption practices if they are told about better alternatives. No government mandate is needed. The opportunity for individual gain or competitive advantage provides all the incentive needed. Without any regulatory mandate, for instance, the U.S. EPA's "Green Lights" initiative convinced thousands of enterprises to substitute high-efficiency fluorescent lighting for traditional incandescent bulbs—reducing electricity use (and thus the emissions from power generation) and lowering company costs.

There has been much policy discussion and academic debate over the extent of opportunities for "win-win" outcomes that yield both environmental benefits and economic gains (Walley and Whitehead, 1994; Porter and van der Linde, 1995; Jaffe et al., 1995). This issue has been viewed in far too static terms, however. Without any doubt, as the cost of performance data, and information more generally, falls, new opportunities to reduce environmental impacts while simultaneously improving competitiveness emerge. Information

technologies lower the cost of access to data and knowledge and, in doing so, transform the trade-off between the precision permitted by a detailed analytic foundation for decision-making and the administrative cost of assembling all the relevant facts and figures. Thus, the "policy possibility frontier" for both governments and corporations changes.

In the corporate setting, environmental metrics can shed light on opportunities to eliminate waste and squeeze out inefficiencies in production and product use.

In fact, substituting information for scarce resources or polluting materials represents a major move toward improved environmental results. More precise data, careful engineering calculations, and resource utilization benchmarking can reduce material and energy throughput in production, by substantial amounts in some cases. Computer-guided saws are helping forest products companies to reduce scrap and increase lumber yields per tree by 30 percent or more. In manufacturing, digital monitoring and management of equipment has generated an array of process refinements that reduce scrap, eliminate emissions, and improve production efficiency. Likewise, farmers are increasingly using portable soil test kits, global positioning systems, and on-board tractor computers to refine their fertilizer and pesticide applications, reducing costs and chemical runoff.

Data mining by corporations eager to understand their markets and data-enabled mass customization by businesses trying to meet the precise needs of their customers promise further opportunities to reduce waste. Catalogue companies used to send out mass mailings based on generalized assumptions about the buying habits of people living in certain zip codes. Today, they can select and solicit customers on a much more refined basis, saving literally tons of paper. In a similar vein, using a state-of-the-art information system, Dell builds computers to each customer's requirements, which translates into reduced material inputs, less waste, and lower pollution.

Data links may also facilitate efficiency gains up and down the value chain and even beyond. Online connections between suppliers and customers have helped a number of companies, from General Electric to Seven-Eleven, to shrink inventories, limit spoilage, and cut waste. While the full potential of e-commerce has not yet been realized, and there may be downsides as well as upsides, the potential for Internet-driven efficiency gains is already visible (Esty, 2001). Companies increasingly are looking upstream and downstream to find ways to reduce costs and increase value. Customer-supplier data exchanges and networks, for example, are deepening commercial relationships, and interconnected companies often find it easier to identify the "least cost avoider" from a pollution perspective (Esty and Porter, 1998).

Beyond cutting costs and improving resource productivity, companies are finding a great many other ways to use environmental information to advantage, as Forest Reinhardt demonstrates in Chapter 4. Good data can facilitate environmental product differentiation, "managing" of competitors through regulatory interventions, and more sophisticated risk reduction. A data-backed environmental lens may even help companies to redefine their "market space" by leading them to new products or services to sell (Kim and Mauborgne, 1999). A number of "environmental information" companies (or environmental divisions of established consulting firms) have sprung up in the last few years to help businesses exploit the wealth of data that is now available to improve their eco-efficiency and to strengthen their environmental strategic positioning. Whether the entities in this niche will survive the dot.com shakeout remains to be seen, but the opportunity to use data to sharpen corporate environmental performance is clearly understood.

Policy Efficiency and Regulatory Reform

In the government realm, quantitative analysis can support efforts to improve regulatory efficiency. Notably, a more data-rich policy process facilitates efforts to shift away from "command and control" regulation toward more sophisticated approaches to managing shared natural resources and controlling pollution. In particular, numbers make possible the use of "market mechanisms," which put a price on emissions, thereby "monetizing" environmental harms.

In some instances, actual markets—the allocation of shares in a scarce resource and the protection of these environmental property rights—can be the basis for pollution control or natural resource management schemes (Demsetz, 1967). In the last few years, for example, New Zealand's fisheries have revived under a system of tradable quotas, with fish landings carefully measured and tracked (Pearse and Walters, 1992). In the United States, acid rain emissions have been cut in half since 1990 under an SO_2 control regime based on tradable pollution allowances (Stavins and Whitehead, 1997). The acid rain reduction program depends heavily on smokestack monitors that transmit data on power plant emissions on a real-time 24-hour-a-day basis.

Fundamentally, market-based approaches to environmental protection can be effective if the transaction costs involved in exchanging (and enforcing) environmental property rights are low (Coase, 1960; Williamson, 1989). But in many circumstances, high transaction costs lead to market failures. Better data, however, can help to bring down these costs by making property boundaries easier to delineate, lowering the cost of vindicating environmental rights, and allowing environmental property rights markets to work more smoothly (Esty, 1996). Just as barbed wire made possible fencing off individual ranches in the American West, thus diminishing

the risk of overexploitation of range land (Rose, 1998), data can serve as virtual barbed wire, enabling property rights in various shared resources to be demarcated and protected.

More generally, data makes regulatory approaches that seek to harness a range of economic incentives easier to implement. Specifically, information on the level of harm from particular pollutants represents a critical first step toward internalizing these externalities. Measures of emissions and impacts can be used to set pollution taxes, facilitate tradable permit schemes, or simply to signal to consumers (for example, through ecolabels) which products are environmentally preferable.

Even where economic-incentive-based regulation is not feasible, better data promise to provide a clearer starting point for "command and control" mandates. More precise pollution information allows regulators to address problems at the scale of the harm, avoid overly broad uniform rules, and tailor control strategies to individual circumstances. In effect, low-cost and easily accessible data make it easier to refine regulations and, thus, to accommodate the diversity across the regulated community. As noted earlier, data and analysis enable more regular and careful policy evaluations leading to continuous improvement in regulatory design. When substandard results are observed more readily, special interest lobbying and other manipulations of the regulatory process become more difficult. Thus, a data-driven policy process may be less susceptible to "public choice" failures.

Better and cheaper data also tend to increase "transparency." As discussed earlier, the increased intensity of information available to opposition leaders, the media, business critics, and NGOs means governments are now subject to greater scrutiny than in the past. Similarly, government regulators, environmental groups, community activists, and the media all have extraordinary access—via the Internet, email, etc.—to facts and figures about corporate environmental activities. Bad acts and poor results are now almost impossible to hide. Although it may be uncomfortable for some companies (as it has been for some governments), this new world of instantaneous connections, open access, and transparency seems likely to intensify focus on pollution problems and natural resource management, speed up feedback loops, and increase the pace of environmental progress.

Bumps in the Road

More data does not necessarily translate into more knowledge in either the policy or the corporate domain. More information could mean more *mis*information and *dis*information, and it could mean that decision processes are overwhelmed. The risk of overloaded systems and data being contorted to serve narrow interests suggests that mechanisms will be needed to ensure quality control and some degree of standardization.

Similarly, data can enrich environmental debates and facilitate "triangulation" on answers in the face of uncertainties. But more information can also diminish the quality of policy dialogues, translate into a battle of numbers, fuel chaos, and lead to breakdown in the decision-making process. What will be determinative are the relevance, validity, and reliability of the new data flows—and the emergence of institutions to promote quality assurance of both the raw information and the analyses that flow from it.

Numbers, moreover, are not value neutral. What is measured and how things are measured builds on presumptions about what is important, which in turn reflect the values of those engaged in the data exercise (Wagner, 1995; Kahan and Braman, 2001). But the "political" nature of statistics, and of science more generally, can be overplayed. Even if precise quantitative results cannot be developed or cardinal rankings are susceptible to challenge, comparative data often will give a relatively clear general picture of the scale and importance of environment challenges or generate an ordinal ranking of policy options.

It is nonetheless important that the assumptions that underlie any particular data set, performance ranking, statistical methodology, or line of analysis be laid bare and exposed to peer review and critical comment. Data should always be tested for quality, consistency, and robustness. Moreover, tools, such as sensitivity analysis, should be used to help data users understand when underlying assumptions (and which ones) drive results.

The Path Forward

As the business community has long understood, measurement matters. Or, more precisely, what matters is what gets measured. Thus, if pollution control and natural resource management efforts are to become more serious, environmental decision-making must become more systematic, data-driven, and analytically rigorous. The chapters that follow illustrate the possibilities that lie ahead. Taken together, they show the revolutionary potential of a commitment to environmental performance measurement.

In Chapter 2, Marc Levy of the Center for International Earth Science Information Network (CIESIN) at Columbia University lays out the structure of the Environmental Sustainability Index (ESI) developed by the World Economic Forum's Global Leaders for Tomorrow Environmental Task Force with the Yale Center for Environmental Law and Policy and CIESIN. He explains the methodology of the analysis (more details can be found in Annex 1). He further spells out how the ESI initiative builds on data on 22 core environmental indicators (see Annex 2) for 122 countries (see Annex 3 for country-by-country results) based on 67 underlying variables

(spelled out in Annex 4). The ranking generated can be seen as an environmental quality of life forecast for a generation or two from now. Levy also outlines the difficulties encountered in constructing the ESI and identifies some of the methodological challenges to a more data-driven environmental future. He argues that these challenges have workable solutions, but that the lack of good data represents a serious obstacle to more rigorous environmental decision-making.

In Chapter 3, Dan Esty of Yale University and Mike Porter of Harvard Business School attempt to identify empirically the drivers of good environmental performance. Focusing on three "output" measures of environmental results—particulate levels, energy efficiency, and SO_2 levels—they find that the breadth and rigor of environmental policies matter. But, perhaps more surprisingly, they also find a strong correlation between environmental performance and a society's underlying legal and economic structure.

Forest Reinhardt of Harvard Business School offers in Chapter 4 a theoretical overview of how a more data-rich environmental domain might affect corporate pollution control and natural resource management. Reinhardt identifies five core strategies by which companies might improve their environmental performance, and simultaneously their competitiveness. He also analyzes the role of information and measurement in making such gains possible.

In Chapter 5, Frank Dixon of the New York–based environmentally oriented investment group, Innovest, applies the logic of environmental performance measurement to the corporate sector. Dixon finds rapidly expanding interest in environmental results as an element of financial analysis with the capital markets. He also highlights the growing evidence that superior environmental performance translates into superior financial returns.

Alois Flatz of Zurich-based Sustainable Asset Management expands on this line of argument in Chapter 6, demonstrating why a growing number of investors are seeking data on corporate sustainability. He also explains how this data is being used to develop indexes tracking the financial performance of leading companies.

In Chapter 7, Peter Cornelius of the World Economic Forum and Friedrich von Kirchbach and Mondher Mimouni of the International Trade Center based in Geneva analyze whether stringent environmental regulations promote or undermine national competitiveness. Using trade data from a range of environmental product sectors, they conclude that, at least in some cases, a strict regulatory regime translates into greater market strength.

Overall, this volume demonstrates how more data-driven analysis might be folded into the environmental realm. The results presented suggest that a more empirical approach to environmental decision-making is possible—and likely to be advantageous. But the contributions to this study also make clear the need for much greater investment in pollution control and natural resource management data collection and generation. The need for more sophisticated analytic methods and statistical techniques is also evident. Despite these gaps and existing limitations, the promise of a more empirical environmentalism looms large.

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Endnotes

1 Indeed, a whole body of academic literature has grown out of the question of "optimal specificity" in regulation (Diver, 1983; Posner, 1992).

2 In some cases, the obscurity results in problems being overestimated or overstated (Hahn and Litan, 1997).

3 Unfortunately, as the Environmental Sustainability Index discussed in Chapter 2 highlights, the existing data sets in the environmental domain are woefully incomplete and lacking in quality assurance. One of the most important conclusions from this study is that the prospect of a more analytically rigorous approach to environmental problem solving depends fundamentally on investments in better data.

4 The same emphasis on data and statistical analysis dominates economics and is increasingly important in other social science disciplines, such as political science and sociology. The environmental field curiously lags in the shift toward empirical underpinnings.

Pilot 2006 Environmental Performance Index

Summary for Policymakers

Yale Center for Environmental Law and Policy
Yale University

Center for International Earth Science Information Network
Columbia University

In Collaboration with:

World Economic Forum
Geneva, Switzerland

Joint Research Centre of the European Commission
Ispra, Italy

Executive Summary

By identifying specific targets for environmental performance and measuring how close each country comes to these established goals, the Pilot 2006 Environmental Performance Index (EPI) provides benchmarks for current national pollution control and natural resource management results. The issue-by-issue and aggregate rankings facilitate cross-country comparisons both globally and within relevant peer groups. The EPI thus provides a powerful tool for improving policymaking and shifting environmental decisionmaking onto firmer analytic foundations.

The EPI centers on two broad environmental protection objectives: (1) reducing environmental stresses on human health and (2) protecting ecosystem vitality. Derived from a careful review of the environmental literature, these twin goals mirror the priorities expressed by policymakers, most notably the environmental dimension of the United Nations' Millennium Development Goals. Environmental health and ecosystem vitality are gauged using sixteen indicators tracked in six established policy categories: Environmental Health, Air Quality, Water Resources, Biodiversity and Habitat, Productive Natural Resources, and Sustainable Energy.

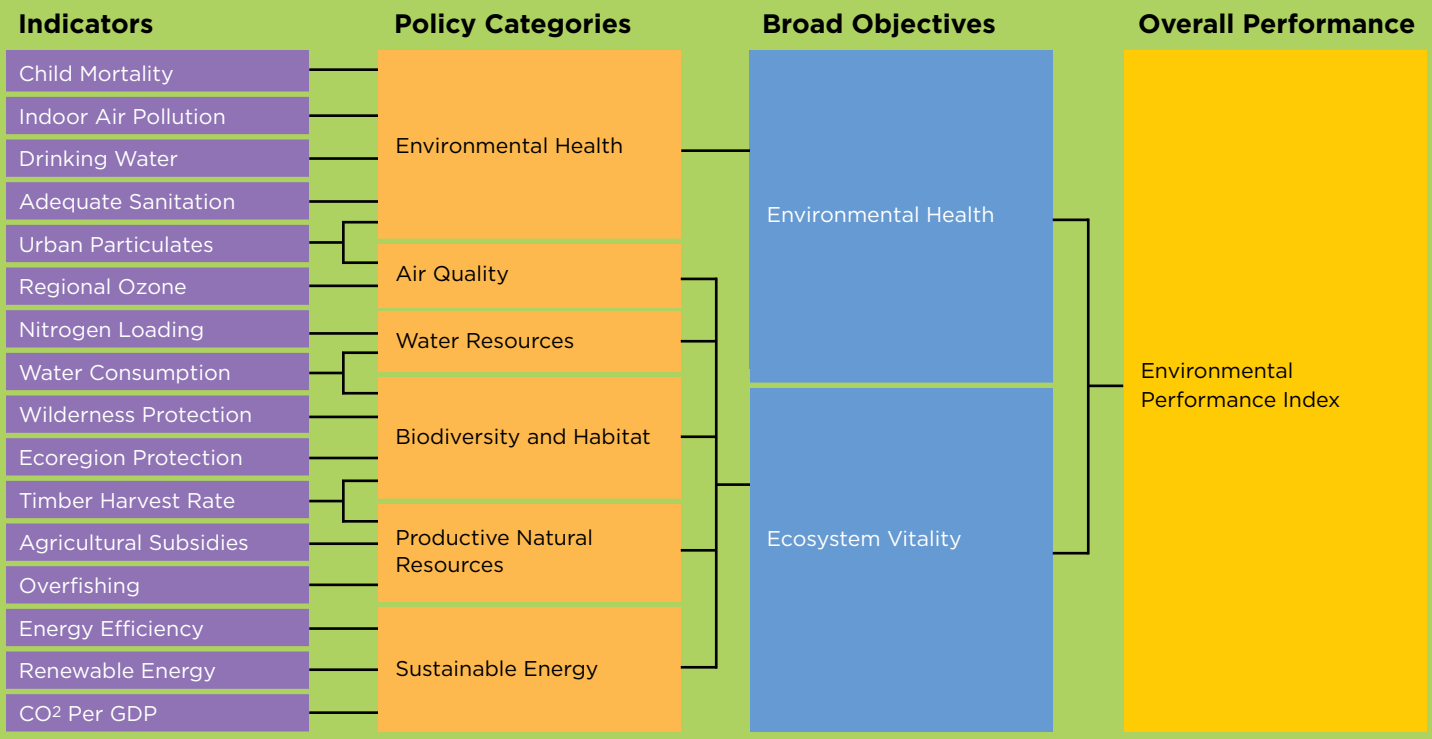
The Pilot 2006 EPI deploys a proximity-to-target methodology focused on a core set of environmental outcomes linked to policy goals for which every government should be held accountable. This approach provides a context for spotting trends and issues of concern, evaluating policy results, highlighting leaders and laggards, and identifying best practices.

While a lack of time-series data and other data gaps constrain the current effort, over time, this methodology should facilitate rankings based on rate of progress and enable global-scale assessments of the sustainability of the world's environmental trajectory.

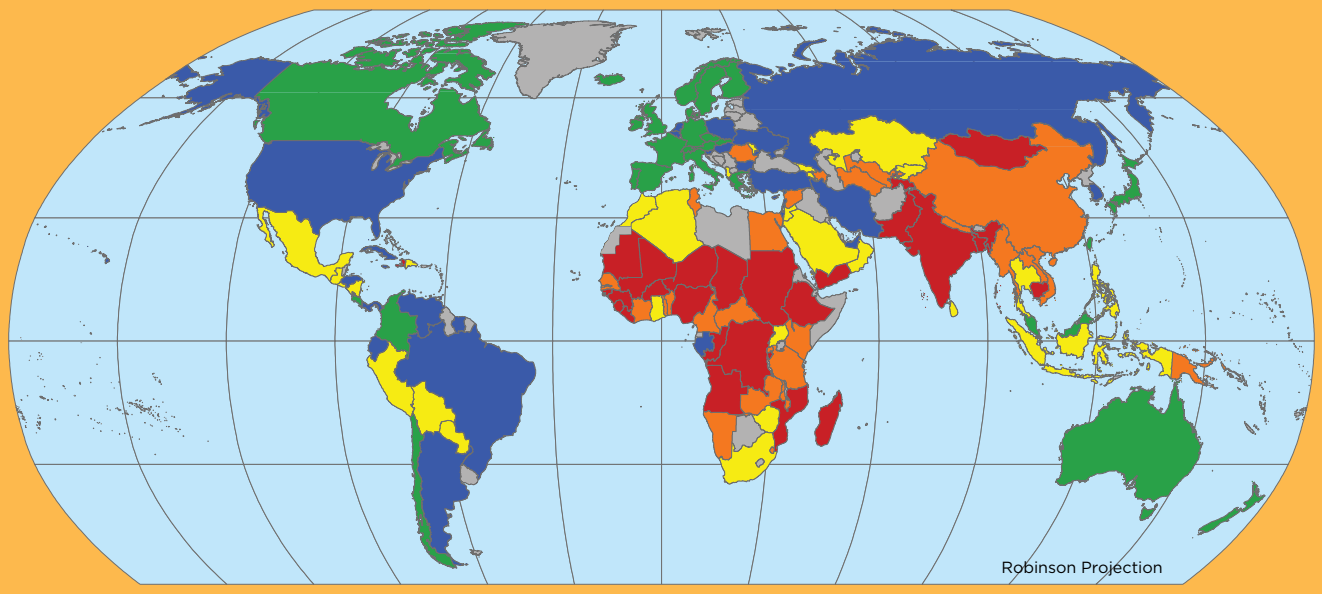
Top-ranked countries – New Zealand, Sweden, Finland, the Czech Republic, and the United Kingdom – all commit significant resources and effort to environmental protection, resulting in strong performance across most of the policy categories. The five lowest-ranked countries – Ethiopia, Mali, Mauritania, Chad, and Niger – are underdeveloped nations with little capacity to invest in environmental infrastructure (such as drinking water and sanitation systems) or aggressive pollution control and systematic natural resource management.

Every country lags its peers on some issues. This suggests that all governments stand to benefit from using the Pilot EPI to identify policy options and models to borrow from other countries. Globally, considerable work remains to be done to put the planet on the path toward environmental sustainability.

Environmental Performance Index Framework



Pilot 2006 Environmental Performance Index



Overall EPI Score by Country Quintile

78.8 – 88.1	69.6 – 78.7	60.3 – 69.5	51.7 – 60.2	25.6 – 51.6	no data

Sub-Saharan Africa

1	Gabon	73.2
2	Ghana	63.1
3	Zimbabwe	63.0
4	South Africa	62.0
5	Uganda	60.8
6	Tanzania	59.0
7	Benin	58.4
8	Côte d'Ivoire	57.5
9	Cen. Afr. Rep.	57.3
10	Rwanda	57.0
11	Malawi	56.5
12	Namibia	56.5
13	Kenya	56.4
14	Zambia	54.4
15	Cameroon	54.1
16	Swaziland	53.9
17	Togo	52.8
18	Gambia	52.3
19	Senegal	52.1
20	Burundi	51.6
21	Liberia	51.0
22	Sierra Leone	49.5
23	Congo	49.4
24	Guinea	49.2
25	Madagascar	48.5
26	D.R. Congo	46.3
27	Guinea-Bissau	46.1
28	Mozambique	45.7
29	Nigeria	44.5
30	Sudan	44.0
31	Burkina Faso	43.2
32	Angola	39.3
33	Ethiopia	36.7
34	Mali	33.9
35	Mauritania	32.0
36	Chad	30.5
37	Niger	25.7

Mid East & N. Africa

1	Lebanon	76.7
2	Israel	73.7
3	U.A.E.	73.2
4	Turkey	72.8
5	Iran	70.0
6	Saudi Arabia	68.3
7	Oman	67.9
8	Algeria	66.2
9	Jordan	66.0
10	Morocco	64.1
11	Armenia	63.8
12	Tunisia	60.0
13	Egypt	57.9
14	Syria	55.3
15	Yemen	45.2

Other E. European & Central Asia

1	Russia	77.5
2	Bulgaria	72.0
3	Ukraine	71.2
4	Albania	68.9
5	Kazakhstan	63.5
6	Moldova	62.9
7	Georgia	61.4
8	Kyrgyzstan	60.5
9	Romania	56.9
10	Azerbaijan	55.7
11	Turkmenistan	52.3
12	Uzbekistan	52.3
13	Tajikistan	48.2

Americas

1	Canada	84.0
2	Costa Rica	81.6
3	Colombia	80.4
4	Chile	78.9
5	U.S.A.	78.5
6	Argentina	77.7
7	Brazil	77.0
8	Trin. & Tobago	76.9
9	Panama	76.5
10	Ecuador	75.5
11	Cuba	75.3
12	Jamaica	74.7
13	Venezuela	74.1
14	Suriname	72.9
15	Honduras	70.8
16	Domin. Rep.	69.5
17	Nicaragua	69.2
18	Guatemala	68.9
19	Paraguay	66.4
20	Peru	65.4
21	Mexico	64.8
22	Bolivia	63.4
23	El Salvador	63.0
24	Haiti	48.9

European Union +

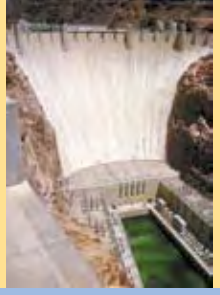
1	Sweden	87.8
2	Finland	87.0
3	Czech Rep.	86.0
4	U.K.	85.6
5	Austria	85.2
6	Denmark	84.2
7	Ireland	83.3
8	Portugal	82.9
9	France	82.5
10	Iceland	82.1
11	Switzerland	81.4
12	Norway	80.2
13	Greece	80.2
14	Italy	79.8
15	Germany	79.4
16	Spain	79.2
17	Slovakia	79.1
18	Netherlands	78.7
19	Slovenia	77.5
20	Hungary	77.0
21	Poland	76.2
22	Belgium	75.9
23	Cyprus	78.4

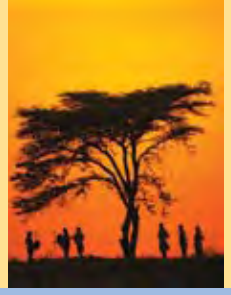
Asia and Pacific

1	New Zealand	88.0
2	Malaysia	83.3
3	Japan	81.9
4	Australia	80.1
5	Taiwan	79.1
6	South Korea	75.2
7	Philippines	69.4
8	Thailand	66.8
9	Sri Lanka	64.6
10	Indonesia	60.7
11	Nepal	60.2
12	Myanmar	57.0
13	China	56.2
14	Papua N. G.	55.5
15	Vietnam	54.3
16	Laos	52.9
17	Cambodia	49.7
18	Mongolia	48.8
19	India	47.7
20	Bangladesh	43.5
21	Pakistan	41.1

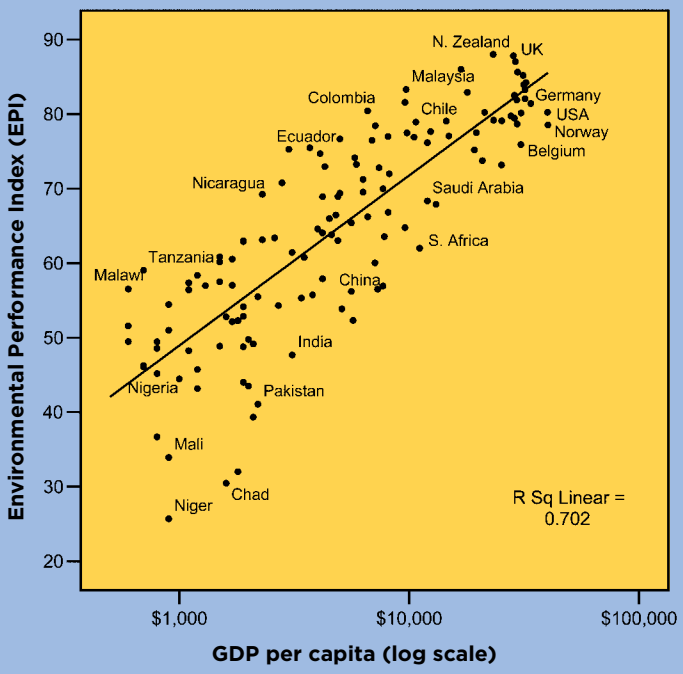
Geographical Peer Groups by Rank, Country, and EPI Score

The EPI facilitates peer grouping and the identification of leaders, laggards, and best practices on an aggregate and issue-by-issue basis.

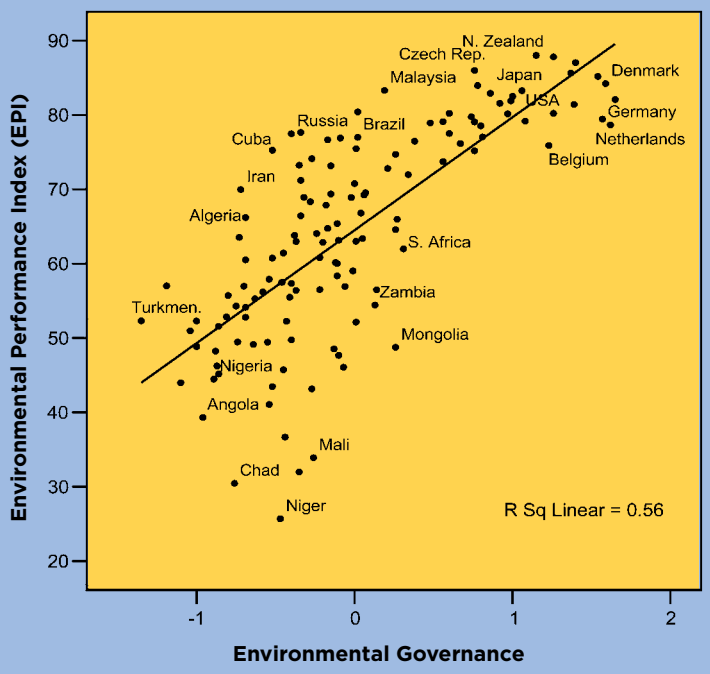




Drivers of Environmental Performance



Wealth emerges as a major determinant of environmental performance. But at every level of development, some countries manage environmental challenges better than their peers, suggesting that policy choices and effort applied also matter.



Good governance – including effective regulation, controls on corruption, adherence to the rule of law, and vigorous debate over environmental policy choices – proves to be an important driver of environmental results. Differences in governance thus explain a significant part of the variation in EPI scores.

Policy Conclusions

- In spite of data gaps, the need for further methodological refinement, and serious scientific uncertainties, the EPI demonstrates that environmental policy results can be tracked with the same outcome-oriented and performance-based rigor that applies to poverty reduction, health promotion, and other global development goals.
- If environmental protection efforts are to be made more empirical and analytically grounded, policymakers need to (1) set clearer targets, especially on the range of important issues for which none now exist, (2) invest in serious data monitoring, indicator tracking, and evaluation programs, and (3) incorporate targets and reporting into policy formation and implementation efforts at the global, regional, national, state/provincial, and local scales.
- Target-based environmental performance benchmarks make cross-country comparisons possible on an issue-by-issue and aggregate basis. Comparative analysis provides information on policy options, a context for evaluating performance, and a basis for holding governments accountable for environmental results.
- Every country confronts critical environmental challenges. Developed countries often suffer from pollution and degraded ecosystems. Developing countries must face the additional burden of investing in water and sanitation systems while establishing governance structures to support pollution control and natural resource management.
- Wealth and a country's level of economic development emerge as significant determinants of environmental outcomes. But policy choices also affect performance. At every level of development, some countries achieve environmental results that far exceed their peers. In this regard good governance appears highly correlated with environmental success.
- The EPI provides a basis for examining the relationship between economic competitiveness and environmental protection. Top-ranked EPI countries emerge as among the most productive and competitive in the world. But industrialization and economic development do lead to environmental stresses, the risk of degradation of ecosystems, and the depletion of natural resources.

Environmental Performance Index – Rankings & Scores

Rank	Country	Score
1	New Zealand	88.0
2	Sweden	87.8
3	Finland	87.0
4	Czech Rep.	86.0
5	United Kingdom	85.6
6	Austria	85.2
7	Denmark	84.2
8	Canada	84.0
9	Malaysia	83.3
10	Ireland	83.3
11	Portugal	82.9
12	France	82.5
13	Iceland	82.1
14	Japan	81.9
15	Costa Rica	81.6
16	Switzerland	81.4
17	Colombia	80.4
18	Norway	80.2
19	Greece	80.2
20	Australia	80.1
21	Italy	79.8
22	Germany	79.4
23	Spain	79.2
24	Taiwan	79.1
25	Slovakia	79.1
26	Chile	78.9
27	Netherlands	78.7
28	United States	78.5
29	Cyprus	78.4
30	Argentina	77.7
31	Slovenia	77.5
32	Russia	77.5
33	Hungary	77.0
34	Brazil	77.0
35	Trinidad & Tobago	76.9
36	Lebanon	76.7
37	Panama	76.5
38	Poland	76.2
39	Belgium	75.9
40	Ecuador	75.5
41	Cuba	75.3
42	South Korea	75.2
43	Jamaica	74.7
44	Venezuela	74.1
45	Israel	73.7
46	Gabon	73.2
47	United Arab Em.	73.2
48	Suriname	72.9
49	Turkey	72.8
50	Bulgaria	72.0
51	Ukraine	71.2
52	Honduras	70.8
53	Iran	70.0
54	Dominican Rep.	69.5
55	Philippines	69.4
56	Nicaragua	69.2
57	Albania	68.9
58	Guatemala	68.9
59	Saudi Arabia	68.3
60	Oman	67.9
61	Thailand	66.8
62	Paraguay	66.4
63	Algeria	66.2
64	Jordan	66.0
65	Peru	65.4
66	Mexico	64.8
67	Sri Lanka	64.6
68	Morocco	64.1
69	Armenia	63.8
70	Kazakhstan	63.5
71	Bolivia	63.4
72	Ghana	63.1
73	El Salvador	63.0
74	Zimbabwe	63.0
75	Moldova	62.9
76	South Africa	62.0
77	Georgia	61.4
78	Uganda	60.8
79	Indonesia	60.7
80	Kyrgyzstan	60.5
81	Nepal	60.2
82	Tunisia	60.0
83	Tanzania	59.0
84	Benin	58.4
85	Egypt	57.9
86	Côte d'Ivoire	57.5
87	Central Afr. Rep.	57.3
88	Myanmar	57.0
89	Rwanda	57.0
90	Romania	56.9
91	Malawi	56.5
92	Namibia	56.5
93	Kenya	56.4
94	China	56.2
95	Azerbaijan	55.7
96	Papua New Guinea	55.5
97	Syria	55.3
98	Zambia	54.4
99	Viet Nam	54.3
100	Cameroon	54.1
101	Swaziland	53.9
102	Laos	52.9
103	Togo	52.8
104	Turkmenistan	52.3
105	Uzbekistan	52.3
106	Gambia	52.3
107	Senegal	52.1
108	Burundi	51.6
109	Liberia	51.0
110	Cambodia	49.7
111	Sierra Leone	49.5
112	Congo	49.4
113	Guinea	49.2
114	Haiti	48.9
115	Mongolia	48.8
116	Madagascar	48.5
117	Tajikistan	48.2
118	India	47.7
119	Dem. Rep. Congo	46.3
120	Guinea-Bissau	46.1
121	Mozambique	45.7
122	Yemen	45.2
123	Nigeria	44.5
124	Sudan	44.0
125	Bangladesh	43.5
126	Burkina Faso	43.2
127	Pakistan	41.1
128	Angola	39.3
129	Ethiopia	36.7
130	Mali	33.9
131	Mauritania	32.0
132	Chad	30.5
133	Niger	25.7

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State Policies on Standards-Based Education Over the Past Decade Found to Have a Positive Relationship With Gains in Student Achievement

Report Finds Significant Gains for Poor and Minority Students Since 1992, With Some States Leading the Pack

EDITORS: Grades on standards and accountability, efforts to improve teacher quality, school climate, and resource equity are available for all 50 states and the District of Columbia, along with student-achievement data and trends over time. Individual state highlights reports available for each state.

WASHINGTON—Jan. 4, 2006—A decade of state efforts to carry out standards-based education shows a positive relationship with gains in student achievement on the National Assessment of Educational Progress, according to *Quality Counts 2006.*

For the first time ever, the 10th edition of the report, released today by *Education Week,* examines the progress that states have made on a core set of policy indicators related to standards-based reform. The report was first released in 1997.

An original analysis conducted for *Quality Counts at 10: A Decade of Standards-Based Education* by the Editorial Projects in Education Research Center finds that state efforts to devise standards, tests, and accountability systems in education are positively related with gains on NAEP reading and math tests in grades 4 and 8 from 1996 to 2005. But the report found a negative relationship between state implementation of policies related to teacher quality and gains in math and reading scores.

"After a decade of tracking state policy efforts in education, our results are at once heartening and sobering," said Virginia B. Edwards, the editor of *Quality Counts 2006* and *Education Week.* "They're heartening because when looked at over more than a decade, student achievement has gotten better, particularly in mathematics and particularly for low-income and minority students.

"An increasing number of states also have embraced a standards-based-education framework, with some of the earliest and most ardent adopters of standards-based accountability systems making some of the most progress in student achievement," she added. "But improvements still have not come far or fast enough."

The comprehensive report on public education in the 50 states and the District of Columbia was produced with the support of the Pew Center on the States.

"The ability to track and compare the progress of state reform efforts is critical to identifying approaches that have a positive impact for students," said Sue Urahn, the director of The Pew Charitable Trusts' state policy program. "This report offers states and the nation a useful benchmark in efforts to provide students with the best education possible."

A DETAILED STATE-BY-STATE PICTURE

For the 10th edition of *Quality Counts,* the Educational Testing Service of Princeton, N.J., conducted a series of special analyses of NAEP scores between 1992 and 2005. The analyses highlight how each state's improvement over the past decade compares with the performance of the nation as a whole. The report also

takes a much closer look than previous studies at which states have made significant progress in closing achievement gaps between black and white, Hispanic and white, and poor and nonpoor students.

The results in mathematics are particularly encouraging. Nationally, NAEP scores in 4th grade math have increased by 18.5 points on a 500-point scale, or nearly two grade levels, since 1992, near the start of the standards movement. Grade 8 math performance improved by 10.7 points.

Seven states had gains in mathematics that significantly outpaced those for the nation as a whole in both grades 4 and 8: Arkansas, Delaware, Louisiana, Mississippi, North Carolina, South Carolina, and Texas. North Carolina posted the largest gains: 28.4 points at grade 4 and 23.4 points at grade 8. Other states saw significantly less growth than the nation as a whole at both grade levels: Iowa, Maine, Missouri, Nebraska, New Mexico, North Dakota, Oklahoma, and Utah.

In contrast, the national average in reading barely budged from 1992 to 2005, inching up just 2 points in grades 4 and 8. But, even here, somewhat better news lies beneath the surface. The scores for black, Hispanic, and low-income youngsters in 4th grade reading increased at nearly triple the national average, or about two-thirds of a grade level.

Delaware was the only state whose reading gains significantly outpaced the national average in both grade 4 between 1992 and 2005 and in grade 8 between 1998 and 2005. But Florida, Maryland, and New York experienced reading gains significantly above the national average in grade 4, and Massachusetts and Wyoming did so in grade 8.

CLOSING ACHIEVEMENT GAPS

The mathematics gains for black and Hispanic 4th graders over the past decade—27.7 points and 24.2 points, respectively—are particularly heartening. One way to think about those gains is that if the scores for white students had not also improved, the advances would have been enough to shrink the black-white achievement gap that existed in 1992 by 80 percent, and the Hispanic-white gap by 94 percent, virtually closing the gap between those two groups in 4th grade math.

Nationally, the achievement gap narrowed significantly between black and white students in math in both grades 4 and 8, and between Hispanic and white students in grade 4. The largest gap-closing on NAEP, nearly 9 points, was found between black and white students in 4th grade math. There was no significant gap-closing in reading nationally.

Progress in closing achievement gaps at the state level was mixed, although the picture is complicated by the fact that many states either did not take part in the state-level NAEP during the periods examined or did not have enough minority students in the NAEP samples to permit valid comparisons of change over time. The following states experienced significant gap-closing in at least one area (black-white, Hispanic-white, or poor-nonpoor students) without a significant decline in average scores for the higher-performing group:

- Grade 4 reading: Connecticut, Delaware, District of Columbia, Florida, New Jersey, New York, Oregon, and Texas.

- Grade 8 reading: Delaware and Utah.

- Grade 4 math: Alabama, Arizona, California, Connecticut, Delaware, the District of Columbia, Florida, Georgia, Indiana, Louisiana, Maryland, Massachusetts, Mississippi, Missouri, New Jersey, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Texas, Virginia, and West Virginia.

- Grade 8 math: California, New York, and Texas.

The 2006 report highlights individual states—including Delaware, Massachusetts, New York, North Carolina, and Texas—whose progress stands out over the past decade, with in-depth profiles that explore what might explain such changes.

STATES' STANDARDS-BASED EFFORTS LINKED TO GAINS ON NAEP

For *Quality Counts 2006*, the EPE Research Center tracked state policy initiatives over the past decade in four core areas—standards, assessments, accountability, and efforts to improve teacher quality—based on 24 specific indicators.

To examine the relationship between standards-based education and gains on NAEP, the research center conducted a series of analyses using regression models. The predictor was changes in the strength of states' standards-based policies between 1997 and 2005. The outcome was changes in NAEP achievement between 1996 and 2005 for math, and between 1998 and 2005 for reading. The center conducted separate analyses for math and reading in grades 4 and 8.

Initial analyses found a moderate positive relationship between states' overall embrace of standards-based education and gains in student math achievement. But the researchers observed a slight negative relationship for reading. Further analyses—exploring the relative contribution of standards, assessments, accountability, and efforts to improve teacher quality—revealed that the implementation of policies to support teacher quality related negatively to achievement gains in both reading and math.

In a second analysis, the researchers eliminated the teacher-quality policies from the overall measure of standards-based-reform implementation in order to focus specifically on the contribution of policies related to standards, assessments, and accountability. Once teacher quality was taken out of the picture, the relationship between states' efforts to implement standards-based reforms and gains in student achievement became much stronger. Improvement for math in grades 4 and 8 became statistically significant, while positive but more modest effects emerged for reading.

Preliminary analyses also found no relationship between state resource and equity indicators and student-achievement gains, after states' initial NAEP performance was taken into account.

STATES AVERAGED GRADE OF C-PLUS

As is true every year, the 2006 report also tracks student achievement across the 50 states and the District of Columbia, and charts progress on states' education systems in four areas: standards and accountability, efforts to improve teacher quality, school climate, and school resources and the equity of school finance systems. States averaged a C-plus across the graded categories, the same as last year.

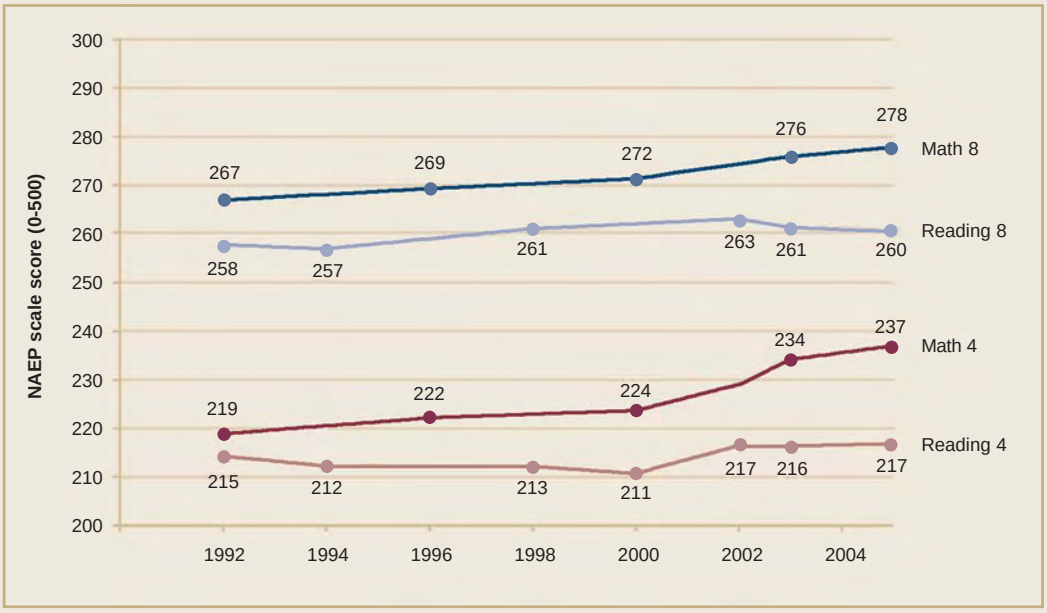
As part of the 10-year retrospective on standards-based education, *Education Week* also invited five prominent policy observers to contribute their personal views to *Quality Counts* on what standards-based policies have accomplished so far, and what the next phase of improvement steps should be.

For the first time, the EPE Research Center also has produced detailed state-by-state reports on how states have performed on this year's indicators and the progress they've made over time. The state highlights reports, which replace and expand on the state summaries that appeared in previous print editions of *Quality Counts,* can be viewed on the Web at www.edweek.org/qc06/shr. The full report can be viewed on the Web at www.edweek.org/qc06.

Education Week, American education's newspaper of record,
is owned and operated by Editorial Projects in Education,
a nonprofit corporation based in Bethesda, Md.

Trends in Student Achievement on NAEP

Since 1992, average student achievement on the National Assessment of Educational Progress has gotten better in mathematics, but results in reading are discouraging.

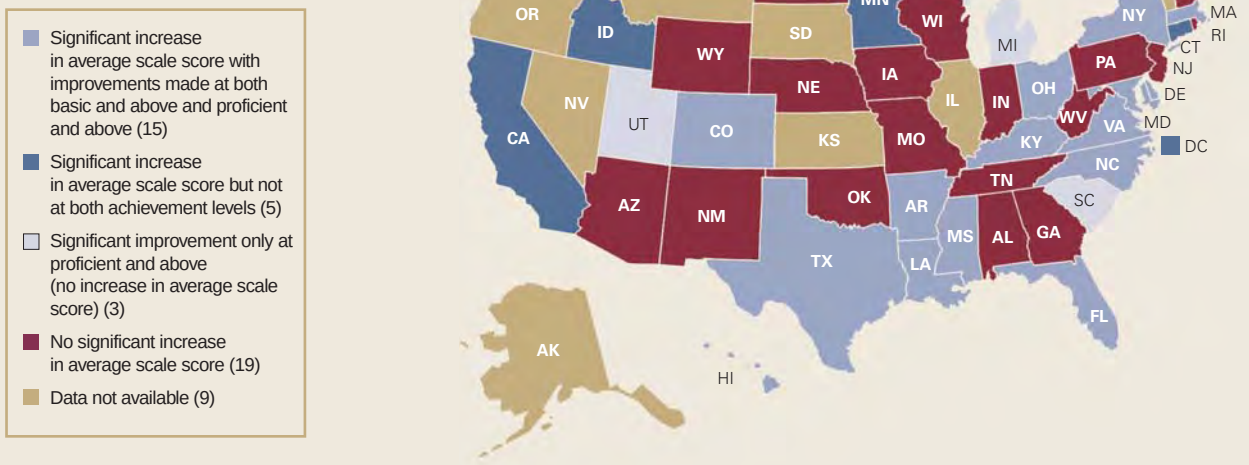


Note: Trends between 1992 and 2005 reflect statistically significant increases for math in grades 4 and 8 and reading in grade 8. Data from 1996 to 2005 reflect the use of accommodations for students with disabilities and English-language learners. Accommodations were not permitted in 1992 and 1994.
SOURCE: Editorial Projects in Education Research Center, 2006

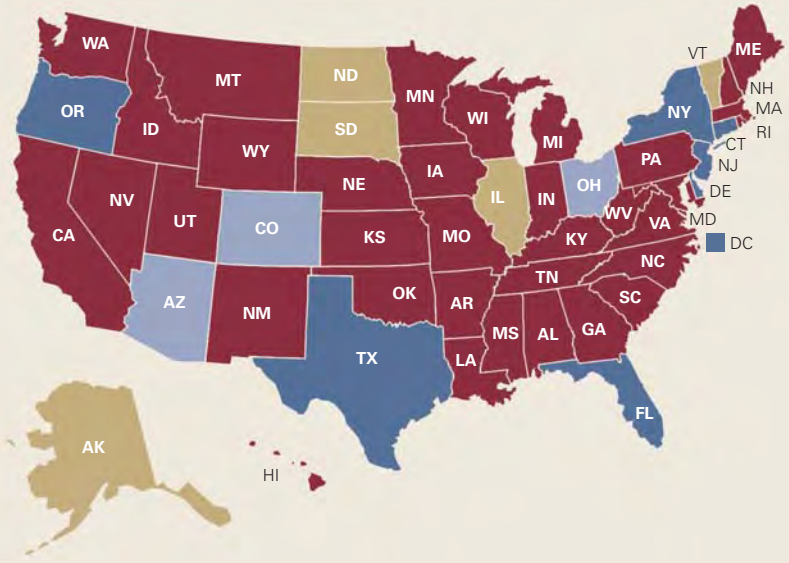
Mapping Out Reading Achievement

Beneath a modest national improvement in 4th grade reading, an analysis reveals considerable variation in patterns of change for individual states.

Gain Patterns in 4th Grade Reading (1992-2005)



Achievement Gap Patterns in 4th Grade Reading (1992-2005)



Note: Accommodations were not permitted for students with disabilities and English-language learners in 1992. Gap analysis is based on average scale scores and examines poor-nonpoor, white-black, and white-Hispanic differences.
SOURCE: Educational Testing Service analysis of U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress, 1992, 1998, and 2005 Reading Assessments

A Decade of Policy Indicators

Quality Counts 2006 tracks state policy efforts over the past decade in four core areas—standards, assessments, accountability, and efforts to improve teacher quality—to see where states have made progress. In general, states received 1 point for each year that they had a particular policy indicator in place. For indicators with an asterisk, states received 2 points if they met the requirements of the indicator entirely (for example, if state standards were clear and specific for all three grade spans, or if state tests included both short-answer and extended-response items), and 1 point if they did so in part (for example, if a state had adopted content standards but not in all four subjects specified, or if it required between one and 10 weeks of student teaching). The national implementation score was calculated by taking the average across all 50 states in each policy area. The analysis does not include the District of Columbia.

The specific indicators are as follows.

Standards:

- State has adopted standards in the core academic subjects of English, mathematics, science, and social studies.*
- English standards at all grade levels—elementary, middle, and high school—are clear, specific, and grounded in content.*
- Math standards at all grade levels are clear, specific, and grounded in content.*
- Science standards at all grade levels are clear, specific, and grounded in content.*
- Social studies standards at all grade levels are clear, specific, and grounded in content.*

Assessments:

- State tests go beyond multiple-choice items to include short-answer questions and those requiring an extended response from students.*
- English tests are aligned with state content standards.
- Math tests are aligned with state content standards.
- Science tests are aligned with state content standards.
- Social studies tests are aligned with state content standards.

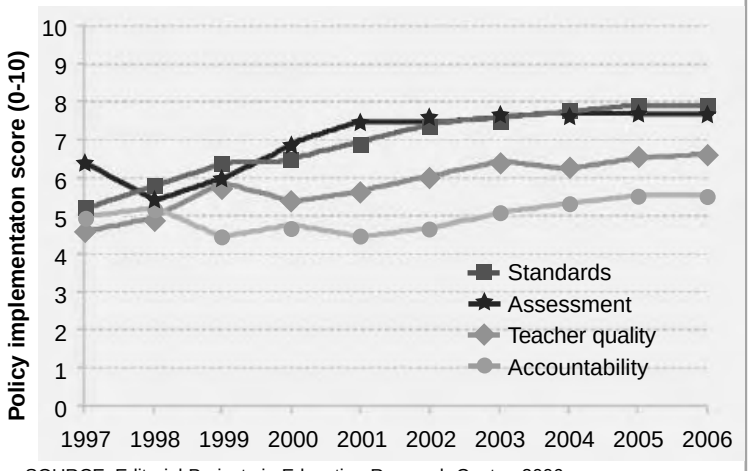
Accountability:

- State provides report cards for all public schools.
- State imposes sanctions on low-performing schools.
- State provides rewards to high-performing or improving schools.
- State took part in the most recent cycle of the state-level National Assessment of Educational Progress.
- Student promotion is contingent on performance on statewide exams.
- High school graduation is contingent on performance on statewide exit or end-of-course exams.

Efforts to Improve Teacher Quality:

- State requires a college major in the subject taught for initial licensure at the high school level.
- Teachers must pass a basic-skills test for initial licensure.
- Teachers must pass a test of subject-matter knowledge for initial licensure.
- Teachers must pass a test of subject-specific pedagogy for initial licensure.
- State provides licensure incentives for teachers who earn certification from the National Board for Professional Teaching Standards.
- State provides financial incentives for teachers who pursue or earn certification from the National Board for Professional Teaching Standards.
- State requires and finances mentoring for all novice teachers.
- Prospective educators must complete 11 or more weeks of student-teaching.*

Trends in Standards-Based-Reform Implementation



SOURCE: Editorial Projects in Education Research Center, 2006

The EPE Research Center Analysis

Quality Counts 2006 finds that over the past decade states have increasingly adopted core policies related to standards-based education—academic standards, aligned assessments, accountability, and efforts to improve teacher quality. The report also highlights widespread achievement gains on the National Assessment of Educational Progress over the same period, particularly in mathematics.

A more controversial issue is whether rising student achievement during this period can be linked to state policy. To explore this question, the EPE Research Center performed a series of statistical analyses using regression models to measure the relationship between state-policy implementation and student achievement.

The predictor for the analyses was changes in the strength of states' standards-based policies between 1997 and 2005. The Research Center used 24 individual policy indicators to create an overall scale for standards-based policy implementation, as well as subscales for standards, assessments, accountability, and efforts to improve teacher quality. The use of these subscales allowed the researchers to consider whether particular policy areas contributed relatively more or less to changes in achievement.

The outcome in the regression models was changes in NAEP scale scores, between 1996 and 2005 for math, and between 1998 and 2005 for reading. The center conducted separate analyses for math and reading in grades 4 and 8. To avoid biasing the results, the regression models controlled for states' initial NAEP performance at the start of the period, and for the initial strength of states' standards-based policies. Preliminary analyses also examined the relationship between achievement gains and measures of financial resources and equity, but found no effects after controlling for prior achievement levels. These finance indicators were not included in subsequent models.

The center's first set of analyses found a moderate positive relationship between states' overall implementation of standards-based policies and student achievement gains for math, but a slight negative relationship for reading. Additional regression models breaking down the policy indicator into its four subscales revealed that implementation of policies to support teacher quality related negatively to achievement gains in both math and reading, while effects were positive for standards, assessments, and accountability.

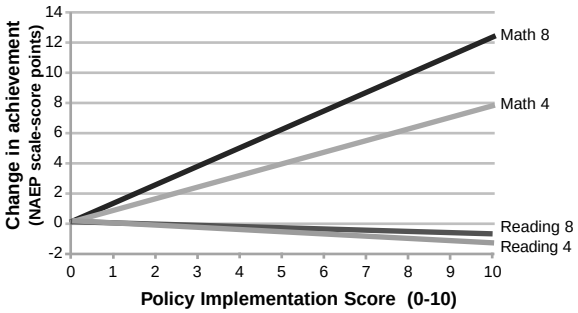
In a final analysis, the Research Center eliminated the teacher-quality policies from the overall measure of standards-based implementation. With attention focused specifically on standards, assessments, and accountability, the relationship between states' policy implementation and gains in student achievement became much stronger. The enactment of a full complement of standards, assessment, and accountability policies was associated with statistically significant gains of 13 points in 8th grade math and 9 points in 4th grade math. Effects were positive but more modest for reading.

Making the Connection: Standards-Based Reform and Student Achievement

The EPE Research Center examines the relationship between state implementation of standards-based policies and changes in student achievement over the past decade.

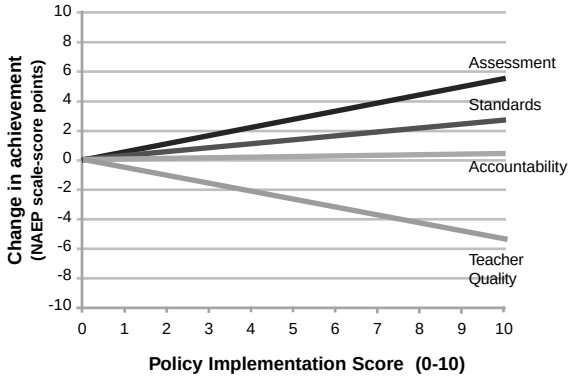
Initial results from regression analyses find moderate positive effects of standards-based reform on math but small negative impacts for reading.

Impacts of Standards-Based Reform (With Teacher Quality) on NAEP Achievement



Detailed analysis shows that policies to improve teacher quality have a consistent negative relationship with achievement growth in both subjects (4th grade math shown).

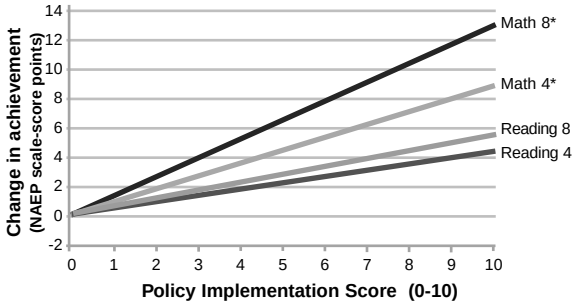
Impact of Standards-Based Policies On 4th Grade Math



In a second set of analyses, teacher-quality indicators are removed from the overall index of standards-based-reform implementation.

The new analysis shows positive impacts of standards-based reform on both subjects. Effects are statistically significant for math.

Impacts of Standards-Based Reform (Without Teacher Quality) on NAEP Achievement



* Standards-based reform impact on achievement is statistically significant.

State Gains on the National Assessment of Educational Progress

The tables below describe the ways in which state trends in student achievement compare with trends for the nation as a whole. States are classified based on statistical analyses used to identify significant differences from the national average. An asterisk (*) denotes states with gains above or below the national average at both grade levels.

Grade 4 Reading 1992-2005	
Above the National Average Achievement in these states improved more than the nation.	**Below the National Average** Achievement in these states has declined over time.
Delaware* Florida Maryland New York	Indiana Iowa Maine New Mexico* Oklahoma* Wisconsin
At the National Average: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Georgia, Hawaii, Idaho, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, West Virginia, Wyoming	
States not participating in the earlier assessment: Alaska, Illinois, Kansas, Montana, Nevada, Oregon, South Dakota, Vermont, Washington	

Grade 8 Reading 1998-2005	
Above the National Average Achievement in these states improved more than the nation.	**Below the National Average** Achievement in these states has declined over time.
Delaware* Massachusetts Wyoming	Arizona Connecticut Nevada New Mexico* Oklahoma* West Virginia
At the National Average: Alabama, Arkansas, California, Colorado, District of Columbia, Florida, Georgia, Hawaii, Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Mississippi, Missouri, Montana, New York, North Carolina, Oregon, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, Wisconsin	
States not participating in the earlier assessment: Alaska, Idaho, Illinois, Indiana, Iowa, Michigan, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont	

Grade 4 Math 1992-2005	
Above the National Average Achievement in these states improved more than the nation.	**Below the National Average** Achievement in these states improved less than the nation.
Arkansas* Delaware* Florida Louisiana* Mississippi* North Carolina* Ohio South Carolina* Texas*	Iowa* Maine* Missouri* Nebraska* New Mexico* North Dakota* Oklahoma* Utah* Wisconsin
At the National Average: Alabama, Arizona, California, Colorado, Connecticut, District of Columbia, Georgia, Hawaii, Idaho, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Tennessee, Virginia, West Virginia, Wyoming	
States not participating in the earlier assessment: Alaska, Illinois, Kansas, Montana, Nevada, Oregon, South Dakota, Vermont, Washington	

Grade 8 Math 1992-2005	
Above the National Average Achievement in these states improved more than the nation.	**Below the National Average** Achievement in these states improved less than the nation.
Arkansas* Delaware* Louisiana* Massachusetts Mississippi* North Carolina* South Carolina* Texas* Virginia	Idaho Iowa* Maine* Missouri* Nebraska* New Mexico* North Dakota* Oklahoma* Rhode Island Utah* Wyoming
At the National Average: Alabama, Arizona, California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Hawaii, Indiana, Kentucky, Maryland, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Tennessee, West Virginia, Wisconsin	
States not participating in the earlier assessment: Alaska, Illinois, Kansas, Montana, Nevada, Oregon, South Dakota, Vermont, Washington	

State Gap Trends on the National Assessment of Educational Progress

The tables below describe the ways in which the sizes of achievement gaps between student groups have changed over time. States are classified based on statistical analyses used to identify significant trends. States that experienced gap closing due to a significant decline in the performance of the higher-achieving group were excluded from the tables.

Grade 4 Reading Gaps 1992-2005 (1998-2005 for Poor-Nonpoor Gaps)

Reduction of Gaps	Subgroups	Widening of Gaps	Subgroups
Connecticut	Hispanic-White	Arizona	Hispanic-White
Delaware	Poor-Nonpoor	Colorado	Hispanic-White
District of Columbia	Poor-Nonpoor	Ohio	Black-White
Florida	Black-White, Poor-Nonpoor		
New Jersey	Hispanic-White		
New York	Hispanic-White, Poor-Nonpoor		
Oregon	Poor-Nonpoor		
Texas	Poor-Nonpoor		

Grade 8 Reading Gaps 1998-2005

Reduction of Gaps	Subgroups	Widening of Gaps	Subgroups
Delaware	Black-White	None	
Utah	Poor-Nonpoor		

Grade 4 Math Gaps 1992-2005 (1996-2005 for Poor-Nonpoor Gaps)

Reduction of Gaps	Subgroups	Widening of Gaps	Subgroups
Alabama	Black-White	None	
Arizona	Poor-Nonpoor		
California	Black-White		
Connecticut	Black-White, Hispanic-White, Poor-Nonpoor		
Delaware	Black-White, Poor-Nonpoor		
District of Columbia	Poor-Nonpoor		
Florida	Black-White		
Georgia	Black-White		
Indiana	Poor-Nonpoor		
Louisiana	Black-White		
Maryland	Poor-Nonpoor		
Massachusetts	Black-White, Hispanic-White		
Mississippi	Black-White, Poor-Nonpoor		
Missouri	Black-White		
New Jersey	Black-White, Hispanic-White, Poor-Nonpoor		
New York	Hispanic-White, Poor-Nonpoor		
North Carolina	Black-White		
Oregon	Poor-Nonpoor		
Pennsylvania	Black-White		
South Carolina	Black-White		
Texas	Poor-Nonpoor		
Virginia	Black-White		
West Virginia	Poor-Nonpoor		

Grade 8 Math Gaps 1992-2005 (1996-2005 for Poor-Nonpoor Gaps)

Reduction of Gaps	Subgroups	Widening of Gaps	Subgroups
New York	Black-White	Hawaii	Poor-Nonpoor
California	Hispanic-White	Minnesota	Poor-Nonpoor
Texas	Hispanic-White, Poor-Nonpoor		

Summary of Grades

Student Achievement

	Standards and Accountability	Efforts To Improve Teacher Quality	School Climate	Resource Equity	Graduation rates[3]		
					2001-02	1992-93	Improvement[5]
Alabama	B	B	C-	C+	60	59	0
Alaska	C-	D	D+	D+	64	67	-4
Arizona	B	D	C+	D+	66	64	+3
Arkansas	C+	A-	C+	B-	71	73	-1
California	B+	B-	C	B-	71	64	+7
Colorado	B	C	B	C-	70	71	-1
Connecticut	B-	A-	B-	C	78	77	+2
Delaware	B+	C+	B	B-	62	67	-6
District of Columbia	C+	D	C-	NA[1]	61	54	+7
Florida	A	C	C	B-	57	61	-3
Georgia	A-	C+	C+	C	58	59	-2
Hawaii	B+	C-	C	NA[2]	66	90	-24
Idaho	B	D	C+	F	77	75	+2
Illinois	B+	C	C+	D+	75	75	0
Indiana	A	B-	C	B-	73	76	-4
Iowa	F	C+	B-	B+	79	83	-4
Kansas	C	B+	B-	C+	75	78	-4
Kentucky	B+	B	C	C	72	69	+3
Louisiana	A	A	C-	B	64	57	+8
Maine	C	D	B	C-	74	79	-5
Maryland	A-	C+	D+	C-	77	77	-1
Massachusetts	A	C	B-	C-	70	76	-6
Michigan	B	D	C-	C-	73	73	0
Minnesota	C+	C	B	B	79	86	-8
Mississippi	C+	C	D+	C-	61	59	+2
Missouri	D+	B-	B	C	77	71	+6
Montana	D	D+	C-	D-	76	81	-6
Nebraska	D	C	C+	C+	78	81	-2
Nevada	B-	C	C-	A-	55	70	-14
New Hampshire	C	C-	B-	D	77	76	+1
New Jersey	B+	B	B-	C-	84	80	+4
New Mexico	A	B	C	B+	61	60	+2
New York	A	B-	C	C	61	64	-3
North Carolina	B	B	C+	C-	65	64	+1
North Dakota	C-	D+	C	D-	80	81	-1
Ohio	A-	B	C+	C	75	70	+5
Oklahoma	B+	B	C+	B-	70	73	-2
Oregon	C+	D	C+	C-	71	70	+1
Pennsylvania	B-	B	C	C-	77	77	0
Rhode Island	C	C-	B	D	74	72	+1
South Carolina	A	A	C+	C	52	60	-8
South Dakota	B-	D+	C+	C+	78	78[4]	0
Tennessee	B	C+	C+	C	59	61	-1
Texas	B-	C-	C	C-	67	57	+10
Utah	C+	C-	C	B+	79	84	-5
Vermont	B-	C-	B-	F	80	80	0
Virginia	B	B+	C	D+	74	75	-1
Washington	B	C	C+	C	66	70[4]	-4
West Virginia	A	B	C+	B	72	78	-6
Wisconsin	B-	C+	B	B-	79	79	0
Wyoming	D	D+	B	C+	72	78	-6
U.S.	—	—	—	—	69	69	+1

Note: A dash (—) in U.S. row indicates that a total was not appropriate.

[1]Because the District of Columbia does not have a state revenue source, it did not receive a grade for equity. The District of Columbia is a single-district jurisdiction.

[2]Because Hawaii is a single-district state, it is not appropriate to measure district-level equity. It did not receive a grade for equity.

[3]Changes in graduation rates over time may reflect changes in state information systems and/or requirements for diploma recipients.

[4]Graduation rates from 1992-93 were not available. Data from the closest available year were used: South Dakota (1993-94) and Washington state (1994-95).

[5]Improvement was calculated using decimals.

Student Achievement

	Reading: 4th Grade			**Reading:** 8th Grade			**Math:** 4th Grade			**Math:** 8th Grade		
	Percent of 4th graders scoring at or above proficient			Percent of 8th graders scoring at or above proficient			Percent of 4th graders scoring at or above proficient			Percent of 8th graders scoring at or above proficient		
	NAEP 2005	State test 2005[1]	Difference[4]	NAEP 2005	State test 2005[1]	Difference[4]	NAEP 2005	State test 2005[1]	Difference[4]	NAEP 2005	State test 2005[1]	Difference[4]
Alabama	22	83	61	22	69	47	21	73	52	15	63 [2]	48
Alaska	27	79 [2]	52	26	80 [2]	54	34	76 [2]	42	29	62 [2]	33
Arizona	24	72 [3]	48	23	67 [3]	44	28	76 [3]	48	26	63 [3]	37
Arkansas	30	52 [3]	22	26	57 [3]	31	34	50 [3]	16	22	33 [3]	11
California	21	47	26	21	39	18	28	50	22	22	37	15
Colorado	37	86	49	32	86	54	39	90	51	32	75	43
Connecticut	38	67	29	34	75	41	42	79	37	35	76	41
Delaware	34	84	50	30	78	48	36	79	43	30	53	23
District of Columbia	11	—	—	12	—	—	10	—	—	7	—	—
Florida	30	71	41	25	44	19	37	64	27	26	59	33
Georgia	26	87	61	25	83	58	30	75	45	23	69	46
Hawaii	23	52	29	18	38	20	27	29	2	18	21	3
Idaho	33	87	54	32	82	50	40	90	50	30	69	39
Illinois	29	67	38	31	73	42	32	79	47	29	54	25
Indiana	30	75	45	28	67	39	38	73	35	30	71	41
Iowa	33	79	46	34	72	38	37	81	44	34	75	41
Kansas	32	78	46	35	77	42	47	85	38	34	68	34
Kentucky	31	68	37	31	62	31	26	45	19	23	36	13
Louisiana	20	64	44	20	50	30	24	61	37	16	51	35
Maine	35	53	18	38	44	6	39	39	0	30	29	-1
Maryland	32	81	49	30	66	36	38	76	38	30	52	22
Massachusetts	44	50	6	44	66	22	49	40	-9	43	39	-4
Michigan	32	82	50	28	73	45	38	73	35	29	62	33
Minnesota	38	78	40	37	74	37	47	78	31	43	76	33
Mississippi	18	89	71	18	57	39	19	79	60	14	53	39
Missouri	33	35	2	31	33	2	31	43	12	26	16	-11
Montana	36	75	39	37	64	27	38	57	19	36	63	27
Nebraska	34	85	51	35	86	51	36	88	52	35	82	47
Nevada	21	45	24	22	51	29	26	51	25	21	49	28
New Hampshire	39	—	—	38	—	—	47	—	—	35	—	—
New Jersey	37	82	45	38	72	34	45	80	35	36	62	26
New Mexico	20	52 [2]	32	19	51 [2]	32	19	39 [2]	20	14	24 [2]	10
New York	33	70	37	33	48	15	36	85	49	31	56	25
North Carolina	29	82	53	27	88	61	40	92	52	32	84	52
North Dakota	35	75	40	37	72	35	40	79	39	35	65	30
Ohio	34	77 [2]	43	36	79 [2]	43	43	66	23	33	60 [2]	27
Oklahoma	25	79	54	25	81	56	29	84	55	21	76	55
Oregon	29	86	57	33	63	30	37	86	49	34	64	30
Pennsylvania	36	64	28	36	64	28	41	69	28	31	63	32
Rhode Island	30	—	—	29	—	—	31	—	—	24	—	—
South Carolina	26	36	10	25	30	5	36	41	5	30	23	-7
South Dakota	33	87	54	35	79	44	41	82	41	36	69	33
Tennessee	27	87	60	26	87	61	28	87	59	21	87	66
Texas	29	79	50	26	83	57	40	81	41	31	61	30
Utah	34	78	44	29	77	48	37	75	38	30	73	43
Vermont	39	—	—	37	—	—	44	—	—	38	—	—
Virginia	37	77	40	36	76	40	39	88	49	33	81	48
Washington	36	80	44	34	69	35	42	61	19	36	51	15
West Virginia	26	81	55	22	80	58	25	75	50	18	70	52
Wisconsin	33	81	48	35	84	49	40	71	31	36	72	36
Wyoming	34	47	13	36	39	3	43	39	-4	29	38	9
U.S.	—	—	—	—	—	—	—	—	—	—	—	—

Note: A dash (—) indicates data were not available or, in U.S. row, that a total was not appropriate.

[1] If states did not offer tests at grades 4 or 8, the EPE Research Center accepted test results from the next-closest grade level.

[2] State implemented a new assessment in 2005; results prior to 2005 may not be comparable.

[3] In Arizona and Arkansas, 2005 results represent the beginning of a new trend line; results prior to 2005 may not be comparable.

[4] Column denotes differences between the total percent of students scoring at or above proficient on NAEP and the total percent of students scoring at or above proficient on the state-required assessment at the equivalent subject and grade. Differences were calculated using decimals. A minus sign (-) denotes that a lower percentage of students scored at the proficient level or higher on the state test than on NAEP.

State of the States: *EPE Research Center* Examines State Education Policy Efforts

STUDENT ACHIEVEMENT:

- Scores from the 2005 National Assessment of Educational Progress show that reading achievement has remained fairly flat over the past two years, while gains in math have slowed.

- Comparisons of achievement data from NAEP with state exam results suggest a wide range of standards for defining proficient performance. While only about 21 percent of 4th graders in Alabama scored at or above "proficient" on the NAEP math test in 2005, 73 percent reached that bar on the state's math exam.

STANDARDS AND ACCOUNTABILITY:

- As of the 1997 inaugural edition of *Quality Counts*, only **31 states** had adopted content standards in the four core subjects and **12** had no academic standards. Now only **Iowa** is still lacking state-level academic-content standards in any core subject.

- **47 states and the District of Columbia** now use tests aligned with state standards at the elementary, middle, and high school levels in English and math, up from **46 states** last year and **29 states** during the 1999-2000 school year.

- **37 states** offer assistance to all of their low-performing schools – up from **36 states** last year. But only **28 states** impose sanctions on all low-performing schools (Title I and non-Title I alike), just one more state than in 1996. Only **16 states** provide rewards to high-performing or improving schools, down from **17 states** in 1996.

- State grades for standards and accountability range from an A in 8 states to an F in Iowa.

EFFORTS TO IMPROVE TEACHER QUALITY:

- For the 2005-06 school year, **42 states and the District of Columbia** require high school teachers to pass subject-matter tests to receive their initial licenses, **six** more states than last year and up from **29 states** in 2000.

- While **31 states** require all high school teachers to major in the main subjects they plan to teach, only **Kansas and Alabama** require the same of all middle school teachers.

- **47 states and the District of Columbia** have systems in place to identify low-performing teacher-preparation programs statewide, but only **11 states** identified any low-performing or at-risk institutions for 2004-05. Only 20 such institutions were identified nationwide.

- **39 states** now pay for teacher professional development, compared with **35** states in the 1998-99 school year. In 2005-06, **15 states** require and finance mentoring for their beginning teachers. *Quality Counts 1997* reported that only **14 states** had such policies.

- State grades for efforts to improve teacher quality range from an A in Louisiana and South Carolina to a D in 6 states and the District of Columbia.

SCHOOL CLIMATE:

- **18 states** now survey students, parents, or teachers about school conditions, compared with **eight states** in 2003.

- For the 2005-06 school year, **33 states** have class-size reduction programs. This represents a slight increase from **31 states** in 2002.

- **33 states and the District of Columbia** have laws or regulations related to school bullying, up from **30 states and the District** last year. But only **15 states** pay for bullying-prevention programs.

- State grades for school climate range from a B in eight states to a D-plus in three states.

RESOURCE ADEQUACY AND EQUITY:

- States averaged **$8,041** in per-pupil expenditures for education in the 2002-03 school year, a **1.6** percent increase from the prior year and a 17 percent increase compared to the 1993-94 per-pupil figure of **$6,899**.

- Between 1993-94 and 2002-03, **27 states** had increased their per-pupil spending by more than 20 percent. **Arkansas, New Mexico, and New Hampshire** increased per-pupil spending by more than 50 percent during that period.

- Like last year, *Education Week* did not grade the states on adequacy, and instead ranked the states on key indicators of education spending. State grades for equity of funding range from an A-minus in Nevada to an F in Idaho and Vermont.

Quality Counts 2006
Available on edweek.org

Quality Counts celebrates its 10th year with a special online version, available free of charge for a limited time, beginning January 4 at 10 a.m. Eastern time. A paid subscription will be required to view the entire report online after February 4.

The online version of *Quality Counts 2006* provides features to help users navigate the report's rich content and find the data they need quickly and easily. Each feature story includes links to key sources and organizations. In addition, users can quickly access each state's policy report card using an interactive state map. A special data-analysis feature enables users to review all indicators for a single state or compare results across two or more states. Fifty-state data tables are downloadable in PDF and Excel formats.

For the first time, the release of *Quality Counts 2006* features special online extras not available in the print version. For instance, users can download individualized reports for the 50 states and the District of Columbia that highlight and expand on state-specific findings from *Quality Counts*. These state highlights reports provide a wealth of information on state policy and student performance, including trend data over the past 10 years. For the print edition of *Quality Counts 2006*, the Editorial Projects in Education Research Center performed an original analysis examining the impact of states' implementation of standards-based education policies on student achievement during the past decade. A special research report with an extended presentation of the results is available online. Beginning January 11, the Web site will host a series of four weekly online chats where edweek.org users can exchange views of standards-based reform with leading experts in educational policy and research.

QUALITY COUNTS 2006 is located at www.edweek.org/qc06

Visit the **EPE RESEARCH CENTER** online

www.edweek.org/rc

- **Education Counts** - More than 250 state-level K-12 education indicators from **QUALITY COUNTS**, **TECHNOLOGY COUNTS**, and other sources, some of which have been tracked for a decade
- **State Info** - Key statistics from across the states on achievement, funding, class size, and more
- **Issues A-Z** - Brief, research-based background essays on issues ranging from technology to teachers, with links to additional resources
- **Special Reports** - Research and analysis from the EPE Research Center on the No Child Left Behind Act, school leadership, and school salaries, plus the annual **QUALITY COUNTS** and **TECHNOLOGY COUNTS** reports and a recent study on the treatment of evolution in state science standards
- **Chats** - Transcripts of live Web chats, featuring leaders in education discussing key policy issues with our online audience

Access the Education Counts database to build custom tables, charts, and maps using **QUALITY COUNTS 2006** data.

Yale Law School

How Does Your State Rank on 'The Democracy Index'?—A Commentary by Heather Gerken

January 1, 2007

The following commentary was published in Legal Times on January 1, 2007.

How Does Your State Rank on 'The Democracy Index'?
By Heather Gerken

Our election system is in scandalous shape — lost ballots, inadequate registration lists, malfunctioning machinery, and poorly trained officials. The kind of intense political battles we have seen recently have put more pressure on this creaky system than it can handle. In 2000, we almost couldn't choose a president. In 2004, we were several thousand votes away from a similar disaster. Had just one of November's close Senate races occurred in a state with the most serious problems, we still might not know who controls that chamber.

Sadly, there is little hope of major reform anytime soon. Congress is not eager to intervene in this traditional area of local control — even in the wake of 2000, it could not pass anything but the toothless Help America Vote Act. Local officials have even less incentive to fix the system because voters tend not to see the costs associated with neglect; they have anecdotes but cannot grasp the broader pattern. As a result, localities are more likely to invest in projects that are visible to voters — such as new schools and more cops — than to upgrade our ramshackle balloting process.

What we need is a new approach to electoral reform, one that turns the system's biggest flaw into a crucial asset. Self-interested politicians are the main obstacle to reform in this country. Any reform should seek to harness the power of partisan competition rather than try to circumvent it. To fix elections, we must realign the interests of politicians with those of the voters.

GUARDED BY FOXES

Every other mature democracy relies on politically insulated bureaucrats to run its elections. In the United States, we depend on partisans, who have no vested interest in reforming our troubled electoral system. These politicians don't want to give up one of their most important weapons: the ability to manipulate the rules to help their friends and hurt their enemies. The foxes are guarding the electoral henhouse.

At the same time, grass-roots reform has failed to gain traction. Despite deep dissatisfaction among voters about the current state of affairs, bread-and-butter reforms — involving the details of counting ballots, jargon-filled evaluations of election machinery, nitty-gritty registration requirements — are so arcane that even political junkies can rarely stomach them. And when election problems do become visible, the fight between reformers and local officials quickly descends into debates that voters have no yardstick for judging. Who, after all, has strongly held intuitions about what kind of voting machine is better or how provisional ballots should be verified?

What we need is a national ranking system for state election-law practices — call it a Democracy Index.

This index should take what Ohio State University law professor Daniel Tokaji calls a "moneyball approach." The word "moneyball," of course, refers to Michael Lewis' book of the same name about the success of the Oakland A's after management substituted hard numbers and empirical research for the gut-level judgments of baseball scouts in making hiring decisions.

Similarly, the Democracy Index could change the terms of the debate by giving voters something new: moneyball politics. It would offer cold, hard numbers and comparative data in place of atmospherics and anecdotes. It would provide bottom-line results in place of subjective judgments. It would let reformers talk like corporate executives, not starry-eyed idealists. And, most important, it would enable the voters to hold election officials accountable for their missteps.

In the end, a ranking system would work for a simple reason: No one wants to be at the bottom of the list.

DRIVEN BY DATA

Right now, Americans lack the kind of concrete, comparative information that would tell them precisely what and where the electoral problems are. There is immense power associated with data-driven comparisons. Think, for instance, about the dramatic effect that the U.S. News & World Report rankings of colleges and graduate schools has had upon those institutions. Congress and the Bush administration have embraced the same idea with the No Child Left Behind Act, which generates report cards ranking each school's performance on a variety of measures.

It should be easier to devise objective measures for evaluating local election practices than for ranking educational quality. After all, voters know what they want — or, rather, what they don't want. A ranking system could tell us, for instance, which states and localities discard the most ballots, which polling places have the longest lines, and where the greatest political or racial disparities in registration and turnout levels lie.

Think about how different the debate on election reform would look under a moneyball lens. Rather than bogging down voters in the technical details of election administration, reformers could let the numbers speak for themselves. In place of debates about which machine is "better" or claims that a given state hasn't done "enough" to measure up to some political ideal, we would know the results of each state's choices: which state has the longest lines, which state discards the most ballots, and which state registers the fewest voters.

Election administrators can talk all they want about what they have done. But they cannot get around the stark reality of a ranking: How is the system working? And why is the state next door doing so much better?

Consider what occurred in Belgium after the Environmental Performance Index — a ranking system produced by the Yale Center for Environmental Law and Policy and Columbia University's Center for International Earth Science Information Network — was first released. Belgian reformers had long tried to persuade legislators that the country's environmental practices were subpar. But when the index actually showed Belgium well below its European counterparts, reformers had a rather large stick to beat legislators with. The party in power could not dispute the fact that Belgium was not keeping up with its peers on a wide range of measures. The Environmental Performance Index precipitated a modest political crisis in Belgium, and the result was genuine reform.

PUSHED BY PARTISANS

Many ranking systems, of course, are ignored, so why should we think the Democracy Index would succeed? After all, few of us worry as much about the performance of our polling place as we do about the success of our children's school. But voters have a ready-made ally that cares deeply about this information: political parties, which can use it for their own advantage if they get the word out. Partisan politics provides a built-in publicity machine to make the Democracy Index work.

The Democracy Index would create an incentive for politicians to do the right thing. Consider, for instance, the fate of Ohio's secretary of state, Kenneth Blackwell, who presided over a 2004 election that was chaotic, error-laden, and tainted by claims of partisan bias. Last year, Blackwell ran for governor (and lost). But imagine what his opponent could have done with hard numbers proving that Ohio had one of the worst-run election systems in the country. Other top election officials, even those rare ones without further political ambitions, would surely remember that campaign.

The Democracy Index would thus harness partisan competition — the primary obstacle to change — in the service of reform. For years, reformers have tried to get partisanship out of election administration. It is the right long-term goal, but history shows that we would need a crisis even bigger than the 2000 debacle to get there. In the meantime, the Democracy Index wouldn't eliminate partisanship, but it would realign the interests of local officials with those of the voters.

The raw materials for putting together the Democracy Index are starting to become available. The Election Assistance Commission, created by Congress to deal with the problems we saw in 2000, has been gathering data on election practices nationwide. Although the information so far is inadequate and sometimes unavailable — another reason for outrage — it represents a start.

The Election Assistance Commission would also be the right kind of institution to put the index together. It is neutral — or at least bipartisan. Though it needs more money and staff to do a proper job, surely even members of Congress opposed to national reform could not object to a bit of sunshine. Without issuing a single regulation, the federal government could improve our democracy.

Even with complete and trustworthy data, it would be impossible to build a perfect ranking system. People would inevitably disagree about which statistics matter and why. But that is precisely the kind of crucial discussion we are not having today. If the Democracy Index did nothing but jump-start an informed national conversation about electoral reform, it would be a major accomplishment. But it has the potential to do a good deal more.

Heather Gerken is a professor at Yale Law School, where she specializes in election law and constitutional law.

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Election Law @ Moritz
information and insight on the laws governing federal, state and local elections

Commentary

Designing the Democracy Index

January 16, 2007 Print Page

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The new year began with an important piece of commentary published on January 1 in *Legal Times* by Heather Gerken, election law expert and professor at Yale Law School. The piece advocates the creation of a "Democracy Index," which would measure how well each state in the nation performs in the administration of its electoral system.

Building upon a similar call by my Moritz colleague Dan Tokaji for the collection of reliable statistics relevant to policy judgments about election administration (as Gerken graciously acknowledges), the piece seeks a hard-number formula that would embarrass states with low scores. This embarrassment, in turn, would generate momentum for reform that would feed on itself in a cyclical "race to the top," as low-scoring states leapfrog over previously higher-ranking ones, which having now slipped in the rankings would undertake initiatives to reestablish their superiority, and so forth.

Anyone familiar with how similar numerical rankings exert competitive pressures on law schools (and universities generally) to improve their performances according to the criteria used to determine these rankings, a phenomenon Gerken herself invokes in support of her proposal, knows the power of these numbers and thus the truth of Gerken's insight.

But as anyone familiar with such rankings also knows, it is important to design these rankings properly. Otherwise, they can create counterproductive incentives. Since the institutions being evaluated by the rankings will attempt to improve whatever numbers are components of the overall formula, and will devote special attention to any factors that receive extra weight in that formula, including the wrong numbers in the formula or giving some factors undue weight will cause these institutions to chase after the wrong priorities.

Thus, a top agenda item for election administration analysts in 2007 should be to see whether a consensus can begin to emerge on what would be an appropriate formula to measure the functioning of a state's electoral system.

Only two weeks into the year, I cannot say that I've gotten very far in my own thinking on this topic, and thus the very sketchy thoughts that follow are intended merely to elicit responses from others in the field. With that caveat in mind, I can imagine three basic principles that might guide the design of this formula. (I believe these principles to be consistent with Gerken's own conception of this project, but I wish to highlight them somewhat more explicitly.)

First, at least for starters, I would think the scope of a Democracy Index should be confined to the "nuts and bolts" subject of voting administration specifically—the procedures for voter registration, the casting and counting of ballots, and the resolution of any disputes that may arise in the event of a close outcome—rather than the broader topic of election law or administration in general

(which would include redistricting, campaign finance, and ballot access issues, among others). It likely will be difficult enough to establish a consensus on how to measure the functioning of even this "nuts and bolts" portion of the overall electoral process. The rest should be left for later, if ever.

Second, I would suggest that the formula attempt to measure only the infrastructure that the state uses to administer the voting process and how well state officials operate that infrastructure, but not endeavor to evaluate social or cultural conditions that might affect the health of the electorate's utilization of the voting process the state provides. In other words, I would be disinclined to include a measurement of voter turnout as part of this Democracy Index, even though voter turnout is often mentioned as a tool for evaluating the health of popular sovereignty within a state. Low voter turnout may be a product of social or cultural conditions, rather than flaws in the infrastructure the state uses to administer the voting process or flaws in how state officials actually operate that infrastructure. To use an analogy from the field of education, the goal here is equivalent to measuring only how well the state does in providing opportunities to learn, not how well students do in taking advantage of those opportunities. There surely is a time and place for measuring the health of electoral participation, just as there is a time and place for measuring the quality of learning rather than just the quality of teaching. But if the Democracy Index is supposed to be a tool for critiquing state government insofar as it underperforms in enabling citizens to exercise the franchise, as I understand it to be, then the formula should be confined to measuring the performance of the government itself, not the citizenry's willingness to take advantage of what the government provides.

Third, I would urge that the design of a Democracy Index endeavor to be as bipartisan as possible, so that its implicit critique of low-scoring states will be seen as valid by public officials on both sides of the aisle and, therefore, a more powerful impetus of reform. Inevitably, advocacy groups on both the left and the right may be tempted to develop their own versions of the Democracy Index, emphasizing the values they most care about. (Predictably, the left will focus on impediments to voting, while the right will focus on perceived risks of fraud.) But any Democracy Index that does not appear to both sides as straight down the middle is likely to be dismissed as inherently biased, especially if dueling formulas emerge. Both the American Conservative Union (ACU) and Americans for Democratic Action (ADA) rank the performance of Members of Congress, but nobody uses either of those rankings as an objective bipartisan measure of how well a legislator is performing in office. Rather, partisans use their side's preferred rankings to determine how closely a legislator toes the party line. It would be a shame, and contrary to its intended purpose, if the effort to design a Democracy Index degenerated into competing measures of how high a "liberal" or "conservative" score each state's voting process would receive.

Even if these three principles are accepted, there is still a wide range of issues to consider regarding the design of a Democracy Index. I, for one, haven't yet even begun to analyze possible factors that might be included in the overall formula. Nor have I addressed whether a series of entirely separate measurements might be preferable to combining them into a single overall formula. After all, to echo Dan Tokaji's invocation of *Moneyball*, the numerical evaluation of baseball talent tends to rely upon a series of separate measurements – On Base Percentage, Slugging Percentage, and so forth – rather than any single overall formula.

For now, I plan to pause my thinking about the design of a Democracy Index, except to float a few potential metrics as candidates for inclusion, whether as separate statistics or combined into a single formula:

1. "Disenfranchisement Rate": the percentage of a state's eligible citizens who attempt to register to vote and to cast a ballot that will be counted, but who are ultimately unsuccessful in their effort to exercise the franchise because of how the state administered the voting process.
2. "Unlawful Vote Rate": the percentage of votes counted by the state that were cast by ineligible individuals, whether knowingly or mistakenly.
3. "Unresolved Elections Rate": the percentage of elections in a state that remain contested or otherwise unsettled by the time the winning candidate is supposed to take office (as has occurred in Florida's 13th congressional district this year).

While these three metrics no doubt need to be supplemented by others and could use considerable conceptual refinement in themselves (not to mention the difficult task of figuring out exactly how one would gather accurate data to make these measurements), they perhaps can serve as a start, just to move the conversation along.

The interesting and important question will be: on January 1, 2008, how much progress will have been made toward a consensus on how best to design a bipartisan Democracy Index?

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information and insight on the laws governing federal, state and local elections

Commentary

The Democracy Index: A Reply

January 30, 2007 Print Page

Heather Gerken
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Many thanks to Ned Foley for letting me respond to his thoughtful post, about designing the "Democracy Index," a national ranking of state election administration practices, which I proposed a few weeks ago in the *Legal Times*. Though I was tempted to reply to Ned's helpful suggestions with a simple "amen," it seems useful to sketch out an important issue flagged by Ned's post and talk about some of the questions raised about the proposal during the last few weeks.

Picking the right metric. Ned and I agree substantially about the way the Index should work. It must focus on the nuts-and-bolts of election administration. It should be assiduously nonpartisan. It ought to encompass issues all voters care about (long lines, discarded ballots) while eschewing hot-button topics like felon disenfranchisement or campaign finance.

Ned is also right that the Index should measure how well the election system is run, not the general health of the state's democracy. In practice, it will sometimes be tricky to separate those issues Consider, for instance, registration rates. Registration rates are plainly influenced by what Ned calls "social and cultural conditions," and it seems unfair – or at least unproductive – to penalize a state for low registration rates caused by socioeconomic conditions beyond election officials' control.

But low registrations rates may also be symptoms of a badly run system. Election administrators sometimes manipulate registration requirements to make it harder for voters to take part in the election. Think about Ohio's Kenneth Blackwell's failed effort to force voter registration cards to be printed on paper of a certain weight. I'd bet that most voters would think that requirement was a sign of mismanagement. Indeed, I suspect most voters would agree that states should make it *easier*, not harder, to register to vote provided there are adequate protections against fraud. The question, then, is whether we can devise output measures that penalize states for creating unnecessary barriers to registration without asking election administrators to fix problems beyond their capacity.

Three other questions about the Index have been posed to me during the last few weeks. The first is whether civil rights groups should back this proposal. The second is what to do if states fake their data. And the last is whether the Index would reduce the incentive for top-ranked states to improve their systems. Let me address each in turn.

The New Vote Denial. The first question – whether civil rights groups should be interested in backing this proposal – has already been answered by OSU's own Dan Tokaji in his article, *The New Vote Denial*. As Dan points out, the "new vote denial" is the old vote denial. We are back to worrying about the use of basic administrative practices to deprive citizens – especially racial minorities – of the right to vote. For this reason, as Rick Pildes has observed, one of the best ways

to protect minority voters is to enact uniform rules protecting the right to vote generally.

To be sure, the Index is different from the traditional weapons in the civil-rights arsenal. It would require advocates of reform to speak the language of corporate executives, not constitutional lawyers. The debate will not be about ideal practices, constitutional rights, or equal protection but hard numbers, accountability, and bottom-line results.

It is, however, essential that we cast the debate in those terms. One of the reasons that the new vote denial is so hard to combat is that it's difficult to prove intentional discrimination or vote dilution in any given instance. We need a different kind of metric to challenge the new vote denial, and the Democracy Index provides that metric.

It would, of course, be a mistake to shift *all* reform efforts to the turf of "moneyball politics"; doing so would obscure the stakes of these debates. Nonetheless, as Spencer Overton has recently emphasized in his comprehensive article on voter i.d., data-driven, factual analysis ought to be part of *every* reformer's vocabulary. Indeed, the Democracy Index seems like a promising way to bridge the political divide over election reform, as words like accountability and transparency are part of *everyone's* vocabulary.

Faking the data. Another important question raised about the Democracy Index is whether states will manufacture data to improve their rankings. This worry is, of course, a happiness problem. If the Democracy Index were having such a powerful effect on politicians that they were tempted to cheat, we would already have come a long way. Nonetheless, every law professor is familiar with the outrageous lengths to which schools have gone to improve their ranking on the U.S. News and World Report ranking (University of Texas's Brian Leiter has been one of the most trenchant observers of this problem, *see, e.g.*, http://www.leiterrankings.com/usnews/guide.shtml).

Happily, there are a number of ways to verify state disclosures. The scholars who have designed the Environmental Performance Index, which ranks the environmental performance of nation-states, have succeeded in ensuring their data are reliable. The same can be done in the election context. For instance, many voters complained in 2004 about long lines at polling places. One way to test whether states are properly disclosing information about voters' experiences would simply be to ask people during exit polls how long it took them to vote. We could also devise random sampling strategies that would give us a pretty good sense of which states were playing fast and loose with their data.

Resting on one's laurels or keeping up with the Joneses? Finally, several friendly critics – who agree that the Democracy Index will encourage states at the bottom of the ranking to improve – worry that top-ranked states would lose any incentive to do better. This situation would still represent an improvement on the status quo – at least the Index would provide an impetus for change somewhere in the system. But it is also possible that a ranking system will encourage top-ranked states to compete among themselves. For instance, residents of reform-minded states like Massachusetts or California might care a great deal about how they rank against similarly progressive states even if they are ranked well above others. Consider, for instance, what took place when the first Environmental Performance Index was released, showing Sweden and Norway ranked first and second on the worldwide ranking. One might have thought that Norway would have celebrated its extraordinary achievement. Just the opposite occurred. Why? Norwegian leaders did not care that they were ranked ahead of 131 other states. What mattered to them? *Sweden* was number one.

Generating a race to the top is not the only way in which the Democracy Index might turn one of our system's liabilities – decentralization – into something positive. For instance, an Index gives states the chance to experiment with different reform strategies while providing objective measures for holding them accountable. States can serve as the "laboratories of democracy" lauded by the Supreme Court. And we can test the results from these many experiments. That is because, consistent with the moneyball approach, the Democracy Index lets us figure out the real drivers of performance. Once we know who runs the best elections, we can figure out the formula behind those successes. For instance, is it money or training that guarantees a well-run system? Even if our end goal is uniform, national legislation, the Democracy Index should help Congress identify best practices, choose sensible standards for regulatory floors, and pinpoint local outliers.

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Monday, June 18, 2007

Setting the Agenda, Part II

Heather K. Gerken

Setting the Agenda for Scholarship on Election Reform
Part II: Domesticating the Foxes

Yesterday I introduced the idea that academics and reformers ought to think harder about the "here to there" problem in the field of election law -- the fact that it is extraordinarily difficult for reform proposals to get traction in this country. As I said yesterday, it is possible to think as systematically about the electoral reform process as we do about the electoral process itself. I proposed that the focus of this new specialty ought to be changing the institutional terrain on which reform battles are fought.

If we want to think systematically about why it is hard to pass electoral reform in this country, the most obvious place to start is the problem of partisan self-interest. The United States is an outlier among developed democracies in that we leave the regulation of politics to politics; elected officials set the rules by which they are elected. In most states, legislators draw their own districts, set campaign finance rules, and regulate political parties. Most elections are administered by partisan officials. Election controversies are often resolved by elected judges. Academics refer to this problem as "the foxes guarding the henhouse."

The problem is that the phrase "the foxes guarding the henhouse" is typically a conclusion, not a starting point for further inquiry. Academics and reformers, of course, often call for nonpartisan districting or argue that the election system should be administered by professional bureaucrats insulated from politics. But nonpartisan districting commissions or professionally administered election systems do not spring, like Athena, fully formed from the head of Zeus. They have to be adopted by somebody, usually a legislative somebody, and that is where the "here to there" question kicks in. Reformers spend a good deal of time asking legislators to do something contrary to their self-interest. Perhaps unsurprisingly, that strategy has not yielded terribly impressive results.

Rather than focusing solely on proposals that require the foxes to stop guarding the henhouse, it might be useful to think more about how to domesticate the foxes. Thus, instead of hoping that politicians will start to act contrary to their self-interest by giving up the power they wield over the election system, we might imagine strategies for realigning the interests of politicians with the interests of voters. Let me offer two examples to illustrate. (Over the next few days, I will focus on a small set of examples, just for clarity's sake).

The Democracy Index. I have recently proposed one strategy for domesticating the foxes: creating a Democracy Index, an idea that has been put into separate bills by Senators Hillary Clinton and Barack Obama. The Democracy Index would function as the rough equivalent of the U.S. News and World Report rankings for colleges. The Democracy Index harnesses partisan competition, the usual obstacle to change, in the service of reform.

Here's why. At present, it is quite hard for voters to hold secretaries of state accountable for their

missteps or reward them for their accomplishments because we lack the most basic information about how well state elections systems are run. If voters cannot assess how well the election system functions, what matters most for the many secretaries of states who want to run for reelection or seek higher office is politics, not professional performance. That means that the fate of a Secretary of State depends heavily on her standing within the party, which will provide the resources and support for her next campaign. The current state of affairs creates the wrong kinds of incentives for secretaries of state. It is not just that some are tempted to administer the process in a partisan fashion. They also have less incentive to rock the boat by lobbying other members of their party hard for needed resources. Legislators, after all, would rather fund cops and teachers than machines and poll workers.

The Democracy Index realigns the interests of secretaries of state with the interests of voters. After all, when voters have information about a state secretary's professional performance, not just her political skills, she should care deeply about how her state ranks. Imagine, for example, you were running against a former Secretary of State like Ohio's Kenneth Blackwell or Florida's Katherine Harris. What better campaign weapon could you imagine than a ranking system showing that your state is one of the worst-run systems in the country? In this fashion, the Democracy Index would help domesticate the foxes. Instead of asking a secretary of state to stop thinking about her political interests in administering the election process, the Democracy Index links her political fate to her professional performance.

A Procedural Solution to Partisan Gerrymandering. Courts -- where many reformers pursue their goals -- can also help us domesticate the foxes. Michael Kang and I are writing a paper proposing "A Procedural Solution to Partisan Gerrymandering." As Supreme Court junkies are aware, the Supreme Court has long struggled with the challenge of regulating partisan gerrymanders. It is a hard problem for an institution that worries about what academics call the "countermajoritarian difficulty," the idea that unelected judges should not second-guess the judgments of the democratic process. On the one hand, there is a good argument that elected officials are not trustworthy representatives of the people because their self-interest -- the desire to draw a districting plan that gets them re-elected or strengthens their party -- prevents them from being genuine representatives of the people on this issue. On the other hand, in order to regulate the partisan gerrymander, the Court would have to decide what division of power is "fair," how much competition there "should" be, how "best" to represent the people. Needless to say, judges are quite reluctant to endorse one theory of democracy over another.

One way out of this dilemma would be for the Supreme Court to adopt a procedural solution to partisan gerrymandering by calibrating its standard of review to the kind of districting process used. So, for instance, courts would closely scrutinize a districting plan produced solely by self-interested legislators. But it would grant deference to -- perhaps even create a "safe harbor" for -- districting processes with sound democratic credentials and thus create incentives for legislators to improve the districting process on their own. For instance, the Court might grant lower scrutiny to any districting plan the legislature chooses, provided it has been approved via a subsequent referendum. As Michael Kang has pointed out in a recent article, such a process would create the right kinds of incentives for legislators, as they would have to compete for the approval of the median voter rather than try to maximize their political advantage when drawing district lines. Or the Court might grant lower scrutiny for any plan that has been "blessed" by appropriate stakeholders (e.g., plans endorsed by good governance groups or by citizens via deliberate polling or citizen commissions). As I have written elsewhere in proposing a "third way" strategy for

administering the Voting Rights Act, if legislators knew that they could guarantee adoption of their districting plan only by obtaining the blessings of the relevant stakeholders, they would have every incentive to build new coalitions and pay attention to constituencies that have been shut out of the districting process thus far. There is a massive amount of political energy devoted to redistricting, and this kind of procedural solution would redirect those energies into more productive channels without removing districting entirely from the democratic process. Here again, such an approach would realign the interests of elected officials with those of the people they represent.

* * * *

In sum, one of the key questions for anyone interested in the "here to there" question is what to do about the problem of political self-interest. What these and other examples suggest is that we can think systematically about a different approach to electoral reform. Rather than taking the conventional route and asking elected officials to act contrary to their self-interest, we should think about ways to domesticate the foxes and realign the interests of partisans with those of voters. As I will discuss in my last post, in the long run such a realignment might even help create a political process that is more receptive to the kind of broad, systemic reforms that good governance groups favor.

Tomorrow I will turn to another component of the "here to there" question -- specifically, framing debates on electoral reform so that these issues get more traction with everyday voters.

Posted 9:28 AM by Heather K. Gerken [link]

Comments:

The democracy index proposal has obvious appeal. If done well, it would be exactly the kind of wedge you're looking for. The problem I see is getting it done well enough.

Who is going to operationalize the criteria? Who is going to collect and interpret the data on compliance? How would it come to pass that the measurement process itself is not politicized?

Perhaps more important, what prevents knowledge of what's on the questionnaire from enabling each Secretary of State to meet specific criteria by neglecting important areas that aren't being monitored?

Have you ever noticed how often two or three bags arrive at the luggage carousel long before the rest of the luggage from the flight? I'm pretty sure this reflects the fact that the clipboard-and-stopwatch folks measure time to first arrival, not average time to arrival (which is more expensive to measure).

Similarly, have you ever heard the expression "teaching to the test"?

These are the sorts of responses I would expect from Secretaries of State and local registrars.
posted by Bob Richard : 8:11 PM

Perhaps outside the scope of this article, but in "domesticating the foxes" we are trying to figure out ways to get the representatives to be representative (once again). If the existing political feedback from the public is either not respected or else too weak to be effective, why will a Democracy Index decisively turn the tide? Perhaps if the Index were "Judgmental" enough to state that performance drops below minimum standards and rights enforcement, the grade of "F" on the Index report card might attract attention. But if it is only a ranking of the states 1-50, there are lots of factors besides Secretary of STate performance that go into that ranking, and it will be dismissed or discounted...

The best way, it seems to me, to domesticate the foxes is to shine a spotlight right on them and call a spade a spade. Democracy Index, while a decent idea, is no substitute for a real media that does investigative reporting as well.
posted by PR Finn : 3:36 PM

Thursday, June 21, 2007

Setting the Agenda, Part V

Heather K. Gerken

Setting the Agenda for Scholarship on Election Reform
Part V: Changing the Institutional Terrain

During the last few days (here, here, here, and here), I have tried to sketch what I think ought to be on the agenda of academics and reformers interested in changing how our election system is run. Because it is so difficult to get election reform passed in this country, I argued that we should focus on the "here to there" problem -- changing the institutional terrain on which reform battles are fought in the hope of creating a more receptive environment for reform generally. We need a new specialty in election law, so that people are as likely to claim expertise in the electoral reform process as they are in campaign finance or districting. I also identified two main lines of inquiry for that new specialty: (1) harnessing partisan energies in the service of reform and (2) engaging citizens in reform debates. I could spend days throwing out more ideas â€“ several inspired by the excellent comments posted by Balkinization readers â€“ and developing the ones I've merely sketched here. Nonetheless, I'll close by saying a bit about the underlying assumptions behind the proposals I have described and explaining why I think they represent plausible first steps.

The main assumption behind these proposals is a premise that undergirds my field and, indeed, most arguments for reform: process shapes substance. Academics and reformers will always tell you that the structures of our democracy help determine the substance of our politics (who gets elected, what gets passed).

What puzzles me is why we have not applied that lesson to the electoral reform process. As I have argued this week, the structure of the reform process determines what kind of reform gets passed. Or, in the case of the United States, the structure of the reform process means almost nothing gets passed. Rather than continuing to fight reform battles on this hostile turf, we should focus on changing the underlying terrain.

The most effective way to change the terrain, in my view, is to blend ideas from the two major intellectual camps in my field. On one side are the participatory democrats, who favor bottom-up, grass-roots reform. On the other side are the competitive democrats, who subscribe to an elite-centered vision of politics and chide the participatory theorists for ignoring the role that power and elite incentives play in shaping electoral politics.

If we want to create a virtuous cycle for reform, we must combine elements of these two theories. We should take advantage of the many ways in which political elites generate political energy -- serve as "conversational entrepreneurs," to use Robert Bennettâ€™s term -- and redirect that energy into a conversation about reform. And we should make it easier for citizens to take part in

that conversation. As I noted yesterday, these two strategies are mutually reinforcing. If partisan self-interest is redirected toward reform, political entrepreneurs have an incentive to find new ways to frame, and draw citizens into, reform debates. If citizens become more engaged in reform debates, political elites will have more incentive to care about reform.

Consider, for instance, Michael Kang's and my proposal that courts adopt a "Procedural Solution to Partisan Gerrymandering." The idea is that the standard of review used by a court to review a districting plan would depend on whether the process that created that plan was appropriately democratic. The courts would thus grant deference to -- perhaps even create a "safe harbor" for -- districting processes with sound democratic credentials.

Think about the incentives such an approach would create for political elites. If a legislator wanted his plan passed (or if he wanted to challenge the plan passed by his opponents), he must compete with his opponents for the support of the citizenry. That means that the intense partisan energies currently devoted to districting battles behind closed doors would be redirected outward toward the citizenry. Because political elites need to drum up support for their proposals, they would suddenly have an incentive to figure out how to frame these issues for everyday citizens. Supporters of a given plan would have to talk about what makes a good districting plan. Opponents would raise questions about the self-interest of those drawing the plan, the absence of competition, or the need for partisan fairness. Political elites, who are old hands at framing issues and generating political energy, would suddenly feel pressured to initiate a conversation about the way we run elections. Perhaps that conversation would eventually lead citizens to demand the type of ideal districting process reformers would prefer. Perhaps not. But having that conversation seems like a pretty good start.

Or consider another strategy for generating a virtuous cycle of reform: the proposal that Congress create a Democracy Index, a national ranking system of state election practices. Because the Index provides citizens with a metric -- a useable cue for evaluating the job performance of secretaries of state -- the Index seems destined to be used as a political weapon in campaigning. And that is a good thing, despite the obvious risks. If the parties can use the Index to political advantage, they have every incentive to get the word out about how well (or badly) our election system is run. The back-and-forth that ensues will provide information about how well our election system works. The parties, in effect, become a built-in publicity machine for educating voters about the need to reform our election administration system. To be sure, this is a conversation starter, not a conclusion, but a conversation starter is what we need right now.

One might fairly ask whether it realistic to think that these intermediate strategies and institutional interventions are more likely to succeed than bread-and-butter reform proposals, like revamping the campaign finance system or creating a nonpartisan election system. It may be that the institutional terrain is too hostile for even these modest interventions. But there are a few reasons to think that it is easier to pass these proposals than conventional reform.

First, these ideas are a good deal more modest than the usual proposals for reform. It seems more likely that legislators will create an advisory commission on electoral reform than give up their power to set the rules entirely. It seems more likely that Congress will ask states to disclose basic information about how the election system is run than to regulate state election systems top-down. It seems more likely that a court will invalidate a redistricting plan on the ground that the redistricting process was undemocratic than on the ground that the plan itself was substantively

unfair. In contrast to most reform proposals, none of these ideas requires legislators to give up control over the election system. Instead, they make it easier for citizens to influence how legislators wield that power.

Second, precisely because these proposals are intermediate strategies -- designed to change the institutional terrain for reform battles rather than enact a particular kind of reform -- many of them have no obvious political valence. It is not hard, for instance, to figure out which party will be helped by a particular campaign finance law or a voter registration rule. These proposals, in contrast, seem less likely to favor one party or another precisely because they are one step removed from substantive proposals.

Finally, most of these proposals harness decentralization in the service of reform. One of the great complaints in reform circles is that our system is too decentralized. Reform is difficult because the election system is run by so many institutions (administrative agencies, legislatures, courts) at so many levels of government (local, state, federal). Many of the strategies I have described often depend on appealing to an actor in one part of the system to help regulate another part, thus mitigating the self-interest problem that usually shortcircuits meaningful reform. The Democracy Index proposal, for instance, asks the federal government to help regulate state administrators. The partisan gerrymandering proposal asks courts to make it easier for the people to have a say in the districting process. Some of these proposals can even be done through purely private means (like Ned Foley's proposal for creating "shadow courts" for resolving election disputes).

There is obviously a good deal more to be said about these and other issues. But that is the point of these posts. There is lots of work to be done on the "here to there" problem . . . and lots of good practical and intellectual reasons to do it.

Posted 9:03 AM by Heather K. Gerken [link]

Comments:

Again, thank you so much for this series of posts.

I have one question about the "harnessing" side of this approach to reform. To what degree can the specific conditions of the emergence of a given reform proposal (by which I mean a non-traditional one like the examples you laid out for us) influence its reception in the traditional arenas of government?

For instance, it seems that the sponsors of a particular proposal lend attributes to it by association that can interfere with (or boost) its reception. If Dick Cheney were the author of the original Democracy Index idea, I imagine the knowledge of that origin would have had an effect upon other's perceptions and their willingness to form the proposal into actionable legislation. I don't think that effect would be necessarily limited to the "competitive democrats" either.

At a higher level, there's the Lakoff problem. Once people know the trick ("changing the frame"), they become acutely aware when it's being used. If "changing the terrain" comes to be recognized as the means through which we can incrementally achieve reforms that are nigh unto impossible otherwise, to what degree does this knowledge allow supporters (both traditional elite politicians and related grassroots campaigns) of the status quo to "detect" possible threats to the system and act to block them, or dismiss them outright as political maneuvering?

posted by PMS_Chicago : 12:01 PM