Direct Democracy in the American States: An Analysis of Roll Call Votes

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beginning August 2004

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Presented at the Midwest Political Science Association, Annual Meeting, Chicago, IL, April 15-18, 2004. The authors would like to thank Ron Szabo and Lukasz Szczepankowski for their programming prowess. Marcia Larson, Shannon Stokes, and Katie O’Banion provided helpful research assistance. Comments are welcome and encouraged.
Representation is the cornerstone of American government, and the very purpose of a legislature is to voice the concerns of citizens. Many of our most fundamental questions about state politics center on this issue, such as whether legislators act in accordance with constituent preferences, what factors influence legislators’ votes on legislation, and how committees may skew the policy process away from median voter preferences. In about half of the states, citizens may affect this relationship via the use of ballot measures, including referendum and initiatives. Advocated by the Populists in the late nineteenth century and therefore more common in western states, these methods of direct democracy may offer citizens leverage in the relationship with legislators, and scholars continue to explore how direct democracy affects representation.

State legislative research has attempted to address these issues, but it has been plagued by a number of problems, such as the lack of data for many states, inconsistency in measures across states, few reliable data time series, and less theoretical and methodological development than research on national institutions. For the study of representation and the impact of direct democracy, several obstacles limit tests of theoretical models, including less access to roll call votes in state legislatures than is true for the case of Congress, limited data for ballot measure votes in any units other than counties, and no consistent measures of legislator ideology. In this study we attempt to overcome these obstacles by using state legislative roll call data and citizen votes on ballot measures to develop a common measure of ideology for legislators and citizens. We also explore a number of spatial theories of state politics that could be tested with this data, but we do not test these theories here.
Testing spatial theories of state politics presents a number of thorny problems, which students of separation of powers modeling at the federal level have carefully identified. The Sword of Damocles has been scale comparability (e.g., Bailey and Chang 2001; Chang 2001). Because ideal point estimates of legislators are typically found through unidimensional or multidimensional scaling of legislative roll-call votes (cf. Clinton, Jackman, and Rivers 2003; Groseclose, Levitt, and Snyder 1999; Poole and Rosenthal 1997), “common space” estimates, with few exceptions (e.g., Poole 1998; Bailey 2003), have been hard to attain for political actors outside the legislature. Judicial votes have also been analyzed (Martin and Quinn 2002). Poole (1998) and Poole and Rosenthal (1997) consider the President to be a “Member of Congress” by treating his positions on congressional roll calls as “votes” (Poole 1998), and Bertelli and Grose (2004) use the positions on roll calls taken by labor secretaries during congressional testimony in a similar fashion. This method of comparison is fruitful, and underlies our approach in this paper.

A separate problem in state politics is the well-known difficulty of data collections. Formal models of direct democracy in the American have been examined through measures that have implications far beyond the spatial distances that drive the theoretical results. While such empirical analyses are essential to the development of our knowledge of state politics, we believe that these models should be subjected to theoretically sound empirical analysis. Because these models involve voter and legislator ideal points, their examination strongly invokes both problems, but as we shall show they can be substantially mitigated.
Literature Review

Over twenty years ago, Malcolm Jewell in a review of state legislative research commented that it “should be more theoretical and more comparative, and that we should bridge the gap that still exists between congressional and state legislative research” (1981, 1). Despite considerable progress on these issues for many areas of state legislative research, Moncrief, Thompson, and Cassie in their review of progress since Jewell’s article comment that research on legislative decision making still “lags considerably behind congressional research” (1996, 317). In this section we assess the progress on several related issues: legislative decision making on roll call votes, the impact of governors on floor activity, the role of committees in the policy process, and the manner in which initiatives and referendum affect legislative decisions.

A number of studies over the years have examined the factors affecting legislative decisions on roll call votes. Research has pointed to a number of significant factors, including cues from other legislators (Ray 1982), constituency racial characteristics (Herring 1990), partisanship (Haider-Markel and Meier 1996; Wright and Schaffner 2002), constituent religious views (Witt and Moncrief 1993), interest groups (Ray 1982), legislator characteristics (Flanagan, Cohen, and Brennann 1993), and legislator gender (Thomas 1991; Reingold 1992). The impact of ideology, however, has been more mixed with a significant impact in some of the above studies but not in others (Flanagan, Cohen, and Brennann 1993). Overall, the assessment of roll call models has been limited by the absence of consistent and reliable measures of legislator ideology. Further, data collection limitations continue to hinder our studies, and we still have not conducted 50-
state roll call studies over time that Jewell (1981) called an important piece of unfinished business over two decades ago.

Another factor that has been difficult to assess because of the absence of data has been the impact of governors on legislation. There have been several studies on the tactics used by governors to affect legislation, the impact of divided government, and the power of governors versus the legislature (Beyle 1978; Fiorina 1992; Morehouse 1998), but it has not been possible to place governors in a common policy or ideological space with legislators so that their impact could be measured.

The impact of committees on legislative decision making, as well as the related topic of whether committee preferences differ from the floor, has received considerable attention. The consensus is that committees are major players in legislative decision making in most legislatures (Rosenthal 1974; Francis 1985; Hamm and Hedlund 1990), but they can be subject to leadership manipulation in some weaker systems (Hamm and Hedlund 1990). The question of whether committees differ substantially from the parent chamber (and thereby taking advantage of their power) has received much less attention in state legislative research than in congressional studies, but recently more studies have emerged. Battista (1998), using state-level NOMINATE scores for four states, found relatively few outlier committees. In a study of 12 states, Overby and Kazee (2000) used constituency characteristics and survey data to show that outlier committees were rare. Recently, Overby, Kazee, and Prince (2004) using NFIB interest group scores from 45 states found state legislative committees to be representative of parent chambers. The recent studies have made good use of the available data, but the inconsistency of interest group scores over time and across legislatures, the problem of missing data in these
scores, and the difficulty of obtaining roll call data limit their ability to assess differences in floor/committee preferences as well as the ability of committees to shift policy away from floor median preferences for all states or over time.

Interest groups, committees, personal ideology, and other political actors may steer policy away from median voter preferences in a legislature, but initiatives and referenda may allow citizens to correct divergent policies either by direct means at the ballot or by indirect means using the threat of an initiative. In those states that allow for initiatives, the frequency of use has increased over the last few decades for a number of important policy issues (Magelby 1994). The original purpose of the initiative was to make government more responsive to the people, but the literature is fairly split on evidence for such an effect.

Gerber (1996; 1999) suggests that direct democracy generally makes legislatures more responsive to popular opinion because citizens can vote directly on policies and legislators may anticipate and respond to the threat of future initiatives. Through a complete information spatial model of the policy process with divergent preferences between the legislator and citizenry, Gerber finds that legislatures constrained by direct democracy pass laws closer to, or at least not further away from, the median voter’s ideal point. In contrast, Matsusaka and McCarty (2001) argue that initiatives produce more responsive legislatures only when legislators are faithful to voter preferences, but voters may be worse off when the agency problem is severe. Using asymmetric information models with uncertainty about the voters’ preferences, they argue it is possible for “shirking” legislators in states with initiatives to choose policies further away from the median voter ideal point than in states with no initiatives, and the impact of initiatives on
voter utility is conditional on the costs and benefits. Additional studies by Matsusaka (1992, 1995) find confirming evidence on the impact of initiatives on fiscal matters.

On the contrary, considerable research suggests that direct democracy does not produce government policies that are more responsive to the will of the people. Lascher, Hagen and Rochlin (1996) using public opinion data and Camobrezco (1998) relying on taxing and spending policies of the states suggest that states with initiatives are no more responsive to public opinion than states without initiatives. Hagan, Lasher and Camobrezco (2001, 1262) note, “There remains good reason to believe that in many policy domains, at least, initiatives do not make state governments more responsive to citizens.”

Smith (2001) shifts the focus to the individual legislator and responsiveness to her own constituency. While other studies use the state legislature as the unit of analysis, Smith argues that a legislator is more likely to respond to the opinion of her constituents on homosexual rights and late term abortions, rather than the opinion of the state as a whole, but this does not hold for a less salient issue such as campaign finance reform.

In sum, the literature on the impact of direct democracy is mixed, and the absence of good data for assessing the relative position of the district and the legislator makes it more difficult to test the rival theories. Likewise, the empirical assessment of most theories that might help us understand state legislative decision-making has been hampered by the failure to develop valid and reliable measures of citizen and legislator preferences across states and over time.
Methodology

The subjects of the initiatives and referenda offered in the states permit scale comparisons. When a citizen votes on a ballot measure, he or she takes a position on some substantive issue that can be linked to a set of bills on which legislators vote. This is likewise true for the governor who, similar to Poole’s (1998) presidents, takes positions on particular agenda items in annual “State of the State” speeches and other venues. We code these positions relative to dimensional classifications of roll call votes in the legislature. For example, Proposition 203 in the 2000 election would mandate English-only instruction in Arizona public schools, while HB 2387 in the 44th Legislature, 1st Regular session provides for bilingual education. Given our county level data, this inverse relationship can be accounted for by coding a county vote for Proposition 203 as a “nay” on HB 2387 and vice versa. Similarly, when Governor Hull called for health care programs for low-income Arizona children in her 1999 State of the State address, she can be seen as taking a “yea” position on HB 2065 and SB1016, which would create a “health start program.” A complete list of these codings as well as summary information on ballot initiatives and State of the State addresses employed in the study appears in the Appendix.

This coding scheme, of course, leaves many roll calls that have votes recorded for legislators as missing data for the Governor and voters (counties). To combat this missing data problem, we employ a recent advance in ideal point estimation using Markov Chain Monte Carlo simulation methods (Clinton, Jackman, and Rivers 2003; Jackman 2001; Martin and Quinn 2002). Specifically, missing data are treated using the method of data augmentation, an MCMC process that substitutes new estimates for the missing data
conditional on the previous state iteratively throughout many observations, thus acting as a Markov Chain (Gill 2002, 325; see Chib and Albert 1997 for details).

**Empirical Estimation**

Roll call data for the Arizona House of Representatives and Senate for the 44\textsuperscript{th} legislature (1999-2000),\textsuperscript{1} election returns for ballot measures in the 2000 election at the county level,\textsuperscript{2} and legislator interest group ratings for 1999-2000,\textsuperscript{3} are publicly available on the internet. Governor Hull’s “State of the State” addresses were requested from the Arizona State Archives, and positions expressed in all of her addresses from 1998-2000 were used to identify related roll calls. We also made use of the results of a survey of Arizona legislators (Richardson and Cooper 2003) in conjunction with interest group ratings to identify a consistently liberal member of the legislature, Senator Kenneth Cheuvront, who can stabilize the estimation process, addressing the issue of rotational invariance (Jackman 2001).

We estimate comparable ideal points for members of the Arizona House of Representatives, Senators, Governor Hull, and a “unitary voter” for each Arizona county using a matrix of dimension 906 x 106. Throughout the 44\textsuperscript{th} Arizona legislature first and second regular sessions and the seven special sessions, 906 non-unanimous roll call votes were taken. Governor Hull, the fifteen county “voters” of Arizona, and the 90 members of the House and Senate account for the columns in the data matrix. We perform static ideal point estimation in that we estimate a single point for each actor throughout all sessions of the 44\textsuperscript{th} legislature. We do not allow them to vary by session (dynamic ideal

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\textsuperscript{1} http://www.azleg.state.az.us/finaldisposition.asp  
\textsuperscript{2} http://www.sos.state.az.us/election/  
\textsuperscript{3} http://www.vote-smart.org
point estimation, i.e., Martin and Quinn 2003). Thus, these ideal point estimates are not comparable across sessions, but are, of course, comparable across the included actors.

**Statistical Model**

The empirical model, then, is based on a random Euclidean preference function over a one-dimensional policy space, $X$, with an error component where $\hat{x}_i$ is the ideal point of actor $i$ (Clinton, Jackman, and Rivers 2003, 3):

\[
U_i(\phi_j) = -||\hat{x}_i - \phi_j||^2 + \varepsilon_{ij} \\
U_i(\alpha_j) = -||\hat{x}_i - \alpha_j||^2 + \eta_{ij} \tag{1}
\]

where $\phi_i$ indicates a “yea” (or for) position by senator $i$ on a roll-call $j$ and $\alpha_i$ indicates a “nay” (or against) position by senator $i$ on roll-call $j$. The actor votes “yea” if $U_i(\phi_j) > U_i(\alpha_j)$ and vice versa. The specification, similar to Poole and Rosenthal (1997), assumes random errors, $\varepsilon_{ij}$ and $\eta_{ij}$. Following Clinton, Jackman, and Rivers (2003), this yields the actor’s choice on roll call $j$, $\theta^*_ij = U_i(\phi_j) - U_i(\alpha_j)$, where $\theta^*_ij$ is the latent ideal point that drives actor $i$’s choice. By assuming that the errors in (1) are $N \sim (0,1)$ and i.i.d. across actors and roll-calls/positions/ballots cast, a probit model with the probability of a “yea” vote as a function of an unobserved regressor, $\theta^*_ij$, is utilized to estimate ideal points (Clinton, Jackman, and Rivers 2003, 3, 24). That *item response* model can be written as

\[
z_{ij} = a_j + \beta_j \theta^*_ij + e_{ij},
\]

where $z_{ij}$ is an observed roll call vote or position by actor $i$ on roll call $j$, $a_i$ is an “item difficulty” parameter for roll call $j$, $\beta_j$ is a “discrimination parameter” for actor $i$ operating on the latent ideal point $\theta^*_ij$, with error $e_{ij} \sim N(0,1)$ (Johnson and Albert 1998).

**Priors**

This approach is Bayesian, permitting the analyst to include prior information about the distribution of the latent ideal points when estimating the statistical model.
Based on an analysis of interest group ratings, and a survey of Arizona legislators conducted by Richardson and Cooper (2003), we constrain Senator Kenneth Cheuvront (D-Maricopa, Dist. 15) to negative values, i.e., our prior information suggests that he is left of center on a unidimensional ideological space in Arizona politics. Senator Cheuvront is an openly gay legislator who is consistently among the most liberal of legislators on various interest group scores. This constraint identifies the direction of the unidimensional policy space, $X \in \mathbb{R}$, such that larger values indicate more conservative ideal points. This does not imply that Senator Cheuvront’s ideal point estimate will be at the extreme left, but only that the other actors’ estimates based on the information that Cheuvront is, in relative terms, a strong liberal.

Ideal points for the 105 remaining actors were estimated with priors of $N(0,1)$. This suggests that the actors are normally distributed around an ideal point of 0—moderate—on the policy dimension, as is the substance of the roll calls. Thus, we have $[a_j, \beta_j]'$ distributed $N_2(b_{0j}, B_{0j})$ with a separate mean and variance for each roll call (item) and $\theta_i^*$ distributed $N(t_{0i}, T_{0i})$, with a separate mean and variance for each ideal point. Our priors are relatively uninformed, and we do this so that the data may “overwhelm” them. Nonetheless, this prior selection for the ideal points reflects the fact that there will be cadres of individuals to the “left” and “right” of any median position in state legislatures, governorships, and the electorate. A more conservative state, such as that of Arizona, will have a higher or “right”-leaning median.

It is important to note that these are simply ideal point estimates, and we have estimated them based on latent variables. We make no claims regarding whether these ideal points are induced by personal preferences, party, or constituency factors (Clinton,
Jackman, Rivers 2003; Poole and Rosenthal 1997; Martin and Quinn 2002). Moreover, and very importantly for the preliminary results performed here, the results presented below (due to time constraints) are based on a procedure with significant evidence of nonconvergence, and should not be considered as valid at this time. They provide only a suggestion of the direction of this research project and show significant promise, as we shall discuss. They should not be used in conjunction with second-stage research, but later results will be useful. So, stay tuned!

Estimation Procedure

We employed the R package MCMCpack, designed by Andrew Martin and Kevin Quinn to perform the estimation, and used the CODA package by Martin Plummer for post-estimation analysis. The MCMCirt1D routine within MCMCpack employs the Gibbs MCMC sampling algorithm (see Clinton, Jackman, and Rivers 2003, 24-27 for technical details) to estimate a one-dimensional item response model according to the specification provided in the previous subsection. Our estimates are based on 20,000 iterations of the Gibbs sampler, discarding the first 5,000 iterations as “burn-in.” This is a small number of iterations given the characteristics (size, percent missing) of the data matrix, warranting our disclaimer above. We “thinned” the output and recorded every tenth iteration post-burn-in. Ideal point estimates are simply the posterior means of these draws.

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4 Burn-in refers to discarding initial iterations in order to remove data generated when the Markov chain may be far off the mean and has not yet converged (see Gill 2002, 329).
5 Traceplot analysis shows that the chain is settling around the means for all actors quite well, though the Raftery-Lewis integrated convergence diagnostic suggests that while non-convergence seems unproblematic for the overwhelming majority of the legislators, the number of iterations must approach 160,000 for the counties and 65,000 for Governor Hull.
Results

Ideal points (posterior means) are presented for all counties and the governor in Table 1, along with posterior standard deviations, which can be considered in the same way as frequentist standard errors, and 95% Bayesian credible intervals (BCI). Table 2 presents the same summary statistics for all legislators (senators and representatives). It is immediately apparent (see note 5) that the posterior standard deviations in Table 1 are much larger than those in Table 2, suggesting the result of our concerns over convergence. Specifically, it is difficult to statistically distinguish the ideal points of one county “voter” from another. This is also true for the ideology estimate for Governor Hull.

Our goal upon completion of our estimates is to analyze a number of the research questions discussed above in the literature review, such as those relating to models of roll call voting, influence of the governor, preference distribution and power of legislative committees, and the impact of direct democracy on the convergence of citizen preferences and legislator roll call voting activity. For now, we have evidence of convergence for many legislators, and concentrate, in what follows, on analyzing their preference estimates relative to secondary source data that can offer some face validity for the legislator scores.

In figures 1 through 5, one can see a series of scatterplots that place our scores on the y-axis and various other political measures on the x-axis (with no causality implied). Each of the figures has a different comparison measure, but the purpose is to provide a quick eyeball indicator of the face validity of the estimated scores. In all cases, our scores are lined up so that more liberal legislators are near the bottom of the chart and
more conservative legislators are near the top. The particular scale of the scores is arbitrary, but the relative distances and placement are substantively important. Each of the y-axis comparison figures are coded differently so we will expect to see negative and positive patterns, and the main issues are consistency and the tightness of the data around the regression lines.

In figure 1, our scores are compared to the interest group ratings provided by the Arizona League of Conservation Voters, and one can see that conservative legislators in our estimates score low on the environmental scorecard and liberals score higher. The fit is strong with an R-square of .61, and most of the diffusion appears to be among the more liberal legislators (according to our estimates). Though positive in direction because of the coding, the relationship between our estimates and the interest group scores from the National Federation of Independent Businesses are also quite consistent with a strong R-square of .64 in Figure 2. We would not expect perfect congruence with single issue interest group scores, but the strong pattern provides face validity.

The x-axis comparison variable in figure 3 is a composite scale developed by Richardson, Russell, and Cooper (2004), and it uses interest group endorsements. Four conservative groups and four liberal groups that endorsed candidates in the 2000 election were examined, and each conservative endorsement received a negative value of one and each liberal endorsement received a positive one. As figure 3 shows, the estimated scores are strongly related to these endorsement scores with an R-square of .66, and the scores are particularly well linked for conservative legislators.

The comparison variables in figures 4 and 5 do not reflect legislator ideology, but they provide information about the minority composition of the district and partisan
preferences of the district. Neither variable should perfectly predict legislator ideology, but we would be surprised to see strong conservatives in minority districts or strong liberals in heavily Bush districts. As both figures show, the estimated ideology scores are consistent with our expectations for both variables.

Overall, these five figures offer some evidence on face validity, and they encourage us to further explore this data and method, but we want to emphasize the preliminary nature of this data. In future iterations of this research, we will improve the dataset and estimation in a number of ways. First, we will add more years of Arizona data so that we can more fully account for the preferences of the citizens and legislators in the state over time. Second, we will drop the county level voter estimates and use initiative data for state legislative districts to get a more finely grained view of voter preferences. Third, more time for further iterations of the data will allow us to feel more confident about the estimates and the standard errors. Finally, this improved data set will allow us to test a number of important research questions about representation in state legislatures, such as the impact of direct democracy on legislative decisions, the role of ideology in roll call voting, whether committees represent the parent chamber, whether committees use their power to shift policy decisions away from the floor median, and the impact of governors on floor activity in legislatures.
Appendix

2000 Arizona Election Ballot Measures

Proposition 100. Proposition 100 proposes a series of amendments to the state constitution that, together with changes to the Enabling Act, will allow some state trust land and trust land income to be used for additional purposes.

Proposition 101. Proposition 101 would amend several sections of the Arizona Constitution to modernize certain out-of-date language including references to people with disabilities. Proposition 101 would also amend the Arizona Constitution to change certain voting requirements to conform with the United States Constitution and other federal laws. Proposition 101 would change the minimum voting age to 18 and eliminate the one-year residency requirement for voting. Under Arizona law, there is a twenty-nine day residency requirement, which remains unchanged. These changes are already enforced in Arizona pursuant to federal law.

Proposition 102. Proposition 102 directs the State to manage wildlife in the public trust to assure the continued existence of wildlife populations. Public trust is a legal concept relating to the ownership, protection and use of natural resources. Under the public trust, the State must manage wildlife for the public benefit, which includes both present and future generations. Proposition 102 would also amend the Arizona Constitution to require that any initiative measure relating to the taking of wildlife does not go into effect unless it is approved by at least two-thirds of the voters who vote on the measure. Currently, the Arizona Constitution requires a simple majority vote for initiative measures. The two-thirds requirement would also apply to measures authorizing or restricting (1) the methods of taking wildlife (2) the seasons when wildlife may be taken. The two-thirds requirement would not apply to legislative enactments or to measures that the Legislature refers to the voters.

Proposition 103. Proposition 103 would amend the Arizona Constitution to expand the Corporation Commission to five members and to change the term of office to four years. Proposition 103 also would limit a member to two consecutive terms in office and would require a member to be out of office for at least one full term before being eligible to serve again. This proposition also provides for a phase in process for the additional Corporation Commission members. Beginning with the election in 2002, the two new members would both serve a two year term and all later terms of office would be for a four year term.

Proposition 104. Proposition 104 would amend the Arizona Constitution relating to residential property tax valuation. Under current law, all similarly classified property is taxed in a uniform manner.

Proposition 105. Proposition 105 would amend the Arizona Constitution to authorize the Legislature to exempt from property tax cemetery property that is actually set aside and used for the burial or storage of dead human beings.
**Proposition 106.** Proposition 106 would amend the Arizona Constitution to establish an appointed Redistricting Commission to redraw the boundaries for Arizona’s legislative districts (for the members of the Arizona Legislature) and to redraw the boundaries for the Congressional Districts (for Arizona’s members of the United States Congress). Currently, state law provides that the Arizona Legislature draws the legislative and congressional district lines. These lines are usually redrawn every ten years, after the state receives the results of the U.S. Census.

**Proposition 108.** Proposition 108 would amend the Arizona Constitution to allow telephone companies that provide local service to set their own rates and charges in areas of the state where competition exists. It is not possible to determine in advance the impact of the Proposition on Arizona’s economy and on state government tax revenues. As a general practice, deregulation of an industry leads to more competition and lower prices than in the previously regulated market. Moreover, increased competition is often associated with additional business spending and employment growth, which in turn tend to raise the general level of economic activity and state tax revenues.

**Proposition 200.** Proposition 200 would require Arizona to deposit all of the money it receives over the next 25 years from the settlement agreement in a "Healthy Children, Healthy Families Fund". Proposition 200 will prohibit Arizona’s counties from suing the tobacco companies to recover tax monies expended by the counties for indigent health care expenses from tobacco-related illnesses. It would also require the counties to turn over to the Healthy Children Healthy Families Fund any sums they recovered from tobacco settlement monies. The fund would also include 70% of the money that is collected by current Arizona tobacco tax revenues. In so doing, Proposition 200 will divert existing tax revenues generated from the tobacco tax without an offsetting reduction in mandated programs previously funded by such taxes. The proposition would also require an annual general fund appropriation of $28 million to fund four programs currently funded by current Arizona tobacco tax revenues. This may result in a need for additional taxes or other revenue sources.

**Proposition 202.** Proposition 202 would change these existing growth management statutes to add additional requirements including that all counties and cities and towns having populations of 2,500 or more would have to adopt "growth management plans" in addition to the plans already required under existing law that include specified environmental and growth regulations. A required element of each growth management ordinance is the drawing of "urban growth boundaries" within the incorporated boundaries of the county or municipality. The boundaries could be no larger than necessary to allow ten years worth of population growth, based on state agency (Department of Economic Security) population projections. Outside the urban growth boundaries, development of homes or businesses requiring rezoning of property to a higher density and extension of water, sewer and other public services to landowners would be prohibited except where it could be shown that "extraordinary and compelling circumstances" warrant an exception and the exception is approved by a four-fifths supermajority vote of the governing body, and if the exception is more than 20 acres, the
exception is approved by the voters at an election. The boundaries may not be expanded unless the state agency population projections allow for it and the change is approved by the voters. The growth management plans must also ensure compliance with federal and state air and water quality standards and not unreasonably burden the supplies of surface and groundwater.

**Proposition 203.** Proposition 203 would repeal the existing bilingual education laws and change the law to require that all classes be taught in English except that pupils who are classified as "English Learners" will be educated through sheltered English immersion programs during a temporary transition period. The sheltered English immersion programs will provide nearly all classroom instruction and materials in English, but may use a minimal amount of the child's native language when necessary. The temporary transition period for sheltered English immersion programs will normally not exceed one year. When an English learner has acquired a good working knowledge of English, that pupil will be transferred to a regular English language classroom.

Proposition 203 allows parents to apply for waivers from participation in English immersion programs if their child already knows English, their child is at least ten years of age or their child has special needs. If the school grants the waiver, the child will be transferred to classes that teach English and other subjects through traditional bilingual education instruction or other generally recognized educational methods that are permitted by law. Proposition 203 allows parents or legal guardians to recover actual and compensatory damages and attorney fees, but not punitive damages, against persons who willingly violate its provisions. Any school official who willfully and repeatedly refuses to comply with Proposition 203 is personally liable for damages and attorney fees to the parents or legal guardians of the child, shall be removed from office and shall be prohibited from holding any position of authority in the public school system for five years. Proposition 203 requires that all students in grades two through twelve be tested annually to monitor their progress in academic subjects and in learning the English language. Students who are classified as severely learning disabled may be exempted from this test. The test score of an individual pupil compared to the national average will be confidentially provided to the parent or legal guardian of that pupil. The combined test scores for schools and school districts will be published on the Internet and the aggregate scores achieved by pupils classified as "limited-English" will be listed in a separate sub-category.

**Proposition 204.** Proposition 204 would require Arizona to deposit all of the money it receives over the next 25 years from the tobacco litigation settlement in the "Arizona Tobacco Litigation settlement fund." Money in the fund would be used to increase the number of people who are eligible for coverage in the Arizona Health Care Cost Containment System (AHCCCS), which is the state’s health care system for the poor. Currently, there are many eligibility categories that determine if a person can receive health care under AHCCCS, including one that requires that a recipient’s net income not exceed approximately 34% of the federal poverty level. If Proposition 204 passes, people who earn up to 100% of the federal poverty level will qualify to receive health care under AHCCCS. Future legislatures could change the eligibility requirements to allow more people to qualify to receive health care under AHCCCS but the Legislature and the
AHCCCS administration could not reduce or limit the number of persons who would be able to enroll in AHCCCS.

**Proposition 300.** Recommendation of the commission on salaries for elective state officers as to legislative salaries have been certified to the secretary of state and are hereby submitted to the qualified electors for their approval or rejection.

**Proposition 301.** Proposition 301 provides for: 1. An increase of six-tenths of one per cent in the rate of state transaction privilege (sales) tax, and an increase of six-tenths of one per cent in the state use tax for twenty years. An increase of six-tenths of one per cent changes the state’s current rate from 5.0% to 5.6%. This equates to an increase of 12% to the state’s rate. If Proposition 301 passes, state general fund expenditures would be an additional $94.5 million in 2002, increasing annually thereafter. These additional expenditures would not be paid for from the increase in the sales tax. The uses of the new revenue are for the following purposes: (a) To authorize and pay for issuance of up to $800 million of new school improvement revenue bonds to correct existing deficiencies in school buildings. At 6% interest total principal and debt service will be approximately $1.4 billion over the next 20 years. (b) For universities to invest in technology and research-based initiatives. (c) For community college districts to invest in workforce development programs. (d) For community colleges that are owned, operated or chartered by an Indian tribe for workforce development and job training. (e) For distribution to the state department of education for the phase-in of five additional school days and associated teacher salary increases resulting from an increased number of school days. (f) For distribution to the state department of education for school safety and character education. (g) For distribution to the state department of education for: (1) Developing a system to measure school performance based on student achievement, including student performance on the AIMS test. (2) Developing a statewide computerized database of information on individual students including student attendance and academic performance. Data items collected on individual students will be developed at the discretion of the Department of Education. (h) For distribution to the failing schools tutoring fund. (i) For reimbursement of the state general fund for the cost of income tax credits in mitigation of increased transaction privilege and use taxes for families with an annual income of less than $25,000 and individuals with an annual income of less than $12,500. (j) For increases in teacher base level compensation, teacher compensation based on performance, and maintenance and operation purposes.

2. Automatic inflation adjustments in the state aid to education base level or other components of a school district’s revenue control limit. 3. The inclusion of school district excess utility costs within the revenue control limit, beginning in fiscal year 2009-2010. 4. A limitation on the school district qualifying tax rates and the county equalization assistance for education tax rate.
Summaries of State of the State Addresses

Governor Hull, 1998

Due to Supreme Court pressures, capital funding of the schools is the major focal point of Hull’s address. She asks for $125 M to resolve the capital finance “crisis”. She advocates charter schools and vouchers like her predecessor Fife Symington, to improve education. One significant proposal in her speech is KidsCare which will provide health insurance to the State’s neediest children. She also urges steps to obtain re-certification for the state hospital and reforms to the Dept Behavioral Health Division. For crime prevention, she promotes a program that involves total community participation. Utilizing API (Arizona Preserve Initiative), Hull hopes to secure the State’s open spaces and allocates $5 M towards this effort while also recommending that $4M be earmarked for the Clean Water Revolving Fund. Fiscally, Hull proposes a corporate income tax and a significant cut in personal property taxes paid by small businesses. To prepare for slowing growth in AZ in the years to come, Hull recommends an increase in the budget stabilization fund, also known as the Rainy Day Fund.

Governor Hull, 1999

Children and education are Hull’s main concerns. She advocates increasing public school funding via the Students First program, a viable solution to school capital financing problems that meets the court requirements. She also advocates upping funds to KidsCare, a program that provides children of the working poor with health care. Hull also allocates $20 M towards reading programs aimed at children K – 3 and recommends implementing the AIMS test as a means of assuring accountability in the classroom. Fiscally, she advocates reducing the vehicle license tax by 5% and the corporate income tax by 7.75%. She promotes the use of tobacco settlement funds towards a new state hospital and various mental health institutions via Arizona’s PATH, Positive Action for Tomorrow’s Health and another $3M was added to PATH’s Healthy Families program to promote better parenting. Arizona’s Scorecard is also recommended by Hull to report on various drug prevention programs and their effectiveness. She creates a Transportation Vision 21 Task Force to assess transportation needs and a Growing Smarter Commission to evaluate growth and sustainability issues at the community level. Governor Hull also pushes for funding of studies of rural watersheds by $1.2 M, and under the aegis of her One Voice campaign, recommends adding 15 new county coordinators for The Governor’s Domestic Violence Prevention Office.

Governor Hull, 2000

Hull continues to promise tax cuts and in response to the technology bubble creates a Partnership for the New Economy. Though she declines the Superintendent’s request for AIMS test preparation and instruction funding, she advocates other improvements (longer school days, smaller class sizes…). She continues to support the Growing Smarter commission that handles issues of growth and development but rejects the more intrusive
Sierra Club initiative as “bad public policy”. Thanks to the tobacco settlement, Hull earmarks funds towards health care facilities such as the Arizona State Hospital. One-third of these tobacco monies will go towards behavioral health needs in response to the Arnold v. Sarn court order. Lastly, $5.2 M will go towards upgrading juvenile detention centers and $6 M for ACTION, Arizona’s compact to improve our neighborhoods, to help neighborhoods fight crime.
Roll Call-Initiative Matches

An asterisk (*) represents roll call on which a “yea” on the initiative represents a “nay” on the bill. All others are coded in the equivalent direction.

P. 100: HB2072--442R State trust lands management, HB 2073 - 442R-- state land, emergency management

P. 101: None

P. 102: SB 1222--441R Appropriation of funds for environmental programs in counties, HB 1251--422R alternative fuels, alcohol fuels, SB12382--441R Environmental License plate design, HB2015--441R Protection of aquatic environment, HB 2018--442R native plant, nonprofit community salvage, HB 2050--442R air quality, Indian lands, HB 2060--442R agricultural preservation district land, HB 2189--441R Defining alternative fuels, HB2264--441R Tax deduction for environmental remediation activities, SB1393--441R Commission environmental study, HB2706--442R land conservation account grants, HB2287--442R renewable energy tax incentive, SB1530--442R fuel use taxes, SB1001--446S moratorium on alternative fuel incentives*, SB1001--442R repal of alternative fuel vehicle incentives*

P. 103: SB 1214 - 442R Construction, licensing, regulation, SB1393--441R Commission environmental study, HB2492--442R oil and gas regulation, geologic surveys, SB1132--442R regulation of home inspectors, SB1330--442R oversight of health care plans

P. 104: SB 1427--442R personal property tax collections, remedies, HB2394--441R Sales tax exemption on natural gas, HB2395--441R Sales tax exemption on expendable materials, HB2396--441R Taxpayer bill of rights, HB2425--441R Income Tax Omnibus Act (lowered taxes), HB2427--441R Exclusions from pers. prop tax for mobile homes, HB2428--441R Personal property tax assessment, SB1240--441R Truth in taxation, schools, HB2093--442R repeal joint legislative tax committee, require statute for tax increase, HB2226--442R tuition tax credit for handicapped students, HB2329--442R tax relief and fiscal control, HB2336--442R grant attorney's fees in tax challenges, HB2459--442R tax subtraction for holocaust victims, SB1129--442R retirement tax equity benefit increases, SB1493--442R estate tax filing extension

P. 105: HB2054--441R Corporate income tax reduction, HB2426--441R Sales tax exemption for liquor wholesalers, SB1059--441R Property tax exemption for fraternal societies, SB1220--441R Property tax exemption for nonprofit housing, SB1235--441R Business tax credit, SB1245--441R Tax exemptions for railroads, machinery, electricity, SB1247--441R Diesel use tax exemption, HB2324--442R property tax expansion to reach deregulated utilities, SB1218--442R property tax exemption process for cemeteries, SB1002--442S sales tax reductions

P. 106: HB2698--441R Redistricting based on census count, HB2416--442R permissive county redistricting
P. 108: HB2360--441R Electric Power Competition, SB1109--442R delayed repeal of electric deregulation study committee

P. 200: HB 2059--442R child support, SB 1348-442R child support, omnibus, SB 1286-442R child support, escrow account, HB2480--441R Tobacco Settlement money allocation, SB1359--441R Tobacco Settlement money allocation, HB2065--441R Lottery money allocation infant health, HB2105--441R Foster care, HB2441--441R Child abuse, special plates, fund, SB1055--441R Joint committee on children and family services established, SB1118--441R Child abuse registry, SB1184--441R Child Support, most wanted postings, SB1185--441R Restrict custody in relocations, SB1229--441R Child welfare, reporting requirements, HB2114--442R child mental health services, HB2401--442R legislative review of child protection cases, SB1136--442R family builders program, SB1160--442R child welfare omnibus, SB1183--442R child care provider oversight, SB1538--442R consent requirements for child psychiatric medication

P. 202: SB1023--441R Municipal general plans, support for small cities, SB1086--442R greater arizona development authority technical assistance provision, HB2499--442R rural economic development study committee, SB1001--444S growing smarter plus, SB 1004--447S alternative fuel programs, SB 1001--445S growing smarter plus

P. 203: HB2387--441R Bilingual education*

P. 204: SB1161--441R Public health nuisances, assessment, SB1409--441R Allocation to rural health centers, HB2649-442R public health, boards, districts, HB2664--442R creation of public health districts, SB1032--442R health insurance portability, SB1153--442R continuation of department of health services, HB2043--442R health care coverage for medical foods, HB2050--442R health insurance plan task force

P. 300: None

P. 301: HB2084--441R Prisoner education, HB2287--441R Leveraging educational assistance partnership program, HB2262--442R employer tax for job training fund, HB2442--442R employer tax credit for worker technology training programs, SB1369--442R tax credits for character education, HB2199--442R worker’s compensation for welfare-to-work participants, HB2379--442R joint technological education districts
References


Table 1: Posterior Density Summary of Ideal Points for Governor and Counties, 44th Arizona Legislature, 1999-2000

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Table 2: Posterior Density Summary of Ideal Points for Senators and Representatives, 44th Arizona Legislature, 1999-2000
Figure 1: Comparison of our scores to scores from the Arizona League of Conservation Voters

\[ y = -0.0179x - 0.3398 \]
\[ R^2 = 0.6051 \]

Figure 2: A comparison of our scores to National Federation of Independent Business scores

\[ y = 0.0278x - 2.8643 \]
\[ R^2 = 0.6389 \]
Figure 3: A comparison of our scores to ideology measured by interest group endorsements

$$y = -0.2606x - 1.1894$$

$$R^2 = 0.658$$

Figure 4: A comparison of our scores to the minority percent in each district

$$y = -0.0262x - 0.2647$$

$$R^2 = 0.3531$$
Figure 5: A comparison of our scores to Bush vote share in the district

\[ y = 5.1196x - 3.5415 \]

\[ R^2 = 0.4307 \]