# Democracy and the Impact of the Limited Vote: <br> Evidence from Connecticut Municipalities ${ }^{1}$ 

James Bourbeau<br>Department of Political Science<br>University of Connecticut<br>Richard Vengroff<br>Dean of the College of Humanities and Social Sciences<br>Kennesaw State University

## Introduction

History teaches us that democracy is both an imperfect and fragile form of government, but one which is spreading in fits and starts at all levels throughout the modern world. As noted by Arend Lijphart, "defining democracy as "government by the people" raises a fundamental question: who will do the governing and to whose interests should the government be responsive when the people are in disagreement and have divergent preferences?" (Lijphart, 1999: 1) In democratic countries this task, or at least the translation process of citizen values and preferences into representative government is a critical function of elections. "The people participate primarily by choosing policymakers in competitive elections. Such elections are instruments of democracy to the degree that they give the people influence over policy making." (Powell, 2000: 3)

The institutional arrangements and structures put in place, i.e. the electoral system, in turn "plays a critical part in determining how political preferences will be aggregated and represented." (Courtney, 2004: 6) As noted by Pippa Norris, "the structural context shapes the incentives to participate at the ballot box by influencing

[^0] Political Science Association, January 5-7, 2006, Atlanta, GA.
electoral costs, electoral choices, and electoral decisiveness." (Norris: 2002: 61) Furthermore, as Thomas Jefferson argued, democracy has its most basic roots at the local level. It is in this context that the study of democracy and electoral systems must be looked at not just as a function of institutions at the national level, but also in counties, towns and municipalities. Connecticut provides an especially interesting laboratory in which to examine these relationships.

Upon first glance, municipal elections in Connecticut appear quite typical. Voters report to the polls in relatively low numbers to select their town or city councils, usually choosing between Democratic and Republican candidates. In such odd-numbered years, elections without members of Congress, the President, or even the Governor just don't garner much attention. Turnout was so low in Mansfield (the home of The University of Connecticut) in 2005 that local referenda for increased funding for the community center and benefits for firefighters and police, while receiving majority approval, failed to pass for lack of quorum (a favorable vote by at least $15 \%$ of the registered voters).

Despite the apparent normality of Connecticut's local elections, their electoral system is anything but typical. Approximately three-quarters of Connecticut's 170 municipalities use the limited vote, a rarely-used semi-proportional electoral system. Such systems are quite uncommon in the U.S. and are generally used in some southern localities to increase the prospects of minority candidates winning seats on town councils and school boards in area wide elections. In principle, semi-proportional systems such as the limited vote make it easier for underrepresented groups and parties (although it is usually used in nonpartisan elections) to gain representation. Such systems can also lead
to a higher level of voter turnout because there are fewer wasted votes and the elections may be more competitive.

There is a limited literature on alternative electoral systems used at the subnational level in the U.S., and this is the first systematic study of the limited vote in Connecticut. In this study we analyze municipal elections in the state of Connecticut that use the limited vote. We first examine the peculiarities of the state's electoral laws and then test several hypotheses derived from the literature on the limited vote with data from 127 towns. Our study focuses on voter turnout, party competition, and the representation of women.

## Alternative Electoral Systems in the United States

The structure of a government's electoral system plays an integral role in the democratic process. Institutional design is the result of political choice and in the United States the choice of electoral systems for legislatures at all levels of government has tended to favor single-member plurality (SMP) districts. However, growing concern over low voter turnout and the representation of women and minorities, stimulated by the voting rights act of 1963 , brought increased scrutiny to this conventional form of American elections (Amy, 2002). Despite these criticisms of SMP, there is a limited amount of scholarly research that has focused on alternative electoral systems in the US.

The differences between Single-Member Plurality districts (SMP) and proportional (PR) electoral systems are well-documented. As Gary W. Cox writes, "The literature is unanimous in viewing SMP as a poor method of producing elected representatives who reflect the full diversity of constituents' opinions" (Cox 1997, 227). In the United States, however, SMP systems are essentially the norm. At the state and
national levels for both legislative and executive elections, the SMP method reigns with few exceptions. The shortcomings of SMP systems in the United States have led scholars to suggest the enactment of reforms that would produce more proportional results (Amy 2002; Barber 2000).

Semi-proportional voting systems generally fall into three different types: the single-transferable vote (STV), the cumulative vote (CV), and the limited vote (LV including SNTV). The STV system has been used in Cambridge, Massachusetts since 1941 and is the most proportional system of the three. Cumulative voting was used for over a century in the selection of the Illinois House of Representatives and is now used in over fifty localities across the nation. The limited vote, which was initially used in several British districts in the late-nineteenth century, is now used in non partisan local elections in several states and in its partisan form in some localities in both Pennsylvania and Connecticut.

Both the Limited Vote (LV) and the Cumulative Vote (CV) are used in some local city council and school board elections in the U.S., primarily in the south (Rush and Engstrom 2001; Bowler, Donovan, and Brockington 2003). These semi-proportional electoral systems are an alternative for municipalities that in the past elected representatives by plurality from individual wards/districts or held area wide plurality elections. Under the CV system, voters are given multiple votes which they are able to distribute as they choose among candidates, placing some or all of these votes for any given candidate or combination of candidates. In LV systems, voters are given a certain number of votes that is less than the number of seats to be filled in the election (for
example, six in a locality with nine elected council members) and can assign one of their votes for each of the candidates that they prefer.

Much of the literature in this area focuses exclusively on the southern U.S., especially on the representation of African Americans and Latinos (Brockington et. al 1998; Engstrom and McDonald 1982) in area wide nonpartisan elections. Alternative voting systems, however, are not limited to the south, nor are they confined to nonpartisan elections. In the state of Connecticut, there are 127 municipalities that elect their councils using the limited vote in a partisan format.

In principle, alternative voting systems can produce more proportional results than plurality systems. In many municipalities there is a desire to insure that local representatives are tied to the entire governmental jurisdiction, hence the utilization of area wide elections. Area wide elections using plurality decision rules tend to favor a single group and can effectively prevent minorities and women from gaining representation. While SMD plurality systems allow for only a single winner, the LV and CV systems are designed for multimember districts. The logic behind this has to do with the advantages of an increase in district magnitude. Nevertheless, it is important to note that they are still technically based on a plurality vote, yet there are some key theoretical distinctions from SMD systems. The increase in district magnitude lowers the threshold of exclusion $\left(\mathrm{T}_{\mathrm{E}}\right)$, reducing the percentage of the vote needed to secure a seat. While not purely proportional, this system at least permits more proportional results than do SMP systems simply because a lower percentage of the vote is needed, making it easier for women, minorities, or third-parties to gain a seat. The more seats on the council, the lower the threshold of exclusion and, thus, the more permissive the electoral system
(Taagepera, 1973). Permissiveness refers to the ease with which diverse groups and parties can win representation.

Aside from the representativeness of alternative electoral systems, electoral scholars emphasize the efficacious benefits of more proportional systems. Specifically, several studies note that proportional electoral systems consistently provide higher levels of voter turnout. There are several theoretical underpinnings to this logic. First, the lower threshold of multimember districts raises the likelihood that a citizen's vote will have an effect on the electoral outcome. Second, citizens are less discouraged in permissive systems that allow for more proportional results. Alternative electoral systems are often cited as a practical and somewhat pragmatic reform to SMP systems. District lines are often redrawn following the census, and this regularly leads to a whirlwind of legislative and legal confrontations (Engstrom 1992; Kousser 1998, 137). It is important to note that the United States' system of redistricting is much more politically influenced than in most other countries that use SMP systems. Most governments use independent nonpartisan commissions to redraw their district boundaries (Butler and Cain 1992 117-39; Butler and McLean 1996; Lyons 1970). Since 1960, however, the U.S. has experienced decennial 'reapportionment wars' that often last for an entire decade (Rush and Engstrom 2001, 9). In LV and CV systems, the need for redistricting is obviated since the elections are area wide.

Several studies have investigated the impacts of alternative voting systems on electoral outcomes. The cumulative vote was used in the Illinois legislature from after the Civil War until the late 1970's (Bowler, Donovan, and Brockington 2003, 20). The limited vote was used in Great Britain between 1867 and 1885 in three seat
constituencies. The system was developed in thirteen districts where there was a great deal of contention over the majority party winning all three seats in each district. Each voter was given two votes, and in every election in the U.K. during this eighteen-year period, no single party won all three seats in any multi-member district (Still 1984, 253). The limited vote is also used in several localities in the southern United States (for example, Augusta, Georgia, Alamogordo, New Mexico, and fifteen municipalities in Alabama), county commissioner positions in Pennsylvania (Featherman 1992, 83), as well as in many at-large local elections in the state of Connecticut (Weaver 1984, 210).

The version of the LV used in Connecticut is somewhat unique because of a state law that limits the percentage of seats that a party can hold in a council. It assures that every council will include both majority and opposition representation regardless of the distribution of the vote. According the Section 9-167A of the Connecticut General Statutes, the majority political party can hold no more than approximately two-thirds of the seats on a city council. Table One illustrates the limits imposed by state law. It is important to note that this rule only applies to purely at large systems (including the state capitol, Hartford), but cities such as Danbury (seven two-member districts and seven at large seats) and New Haven (single member districts) are exempt.

## Table One

| Total <br> Membership | Majority <br> Limit |
| :---: | :---: |
| 3 | 2 |
| 4 | 3 |
| 5 | 4 |
| 6 | 4 |
| 7 | 5 |
| 8 | 5 |
| 9 | 6 |
| $>9$ | $2 / 3$ |

Source: Connecticut General Statutes (www.opm.state.ct.us)

Because of the statutory limits placed on party levels in city councils, LV elections in Connecticut are affected by the limited nomination (LN): parties cannot nominate more candidates than can win seats. The specific effects of LN are of great interest in this study. While it is difficult to speculate on the precise impact of this electoral rule, it has the potential to strengthen the major political parties, actually decreasing the competitiveness of elections and possibly diminishing the representativeness of the LV system.

Even in municipalities with high levels of partisan competition in a pure at large system, the majority party legally can not nominate more candidates than the number of seats they can win. In localities where the majority party has a great advantage, there may be less motivation to limit the number of candidates, but not to a point where the party risks diluting its own vote. Thus, the threshold of inclusion, as it applies to other LV systems, is changed by the LN. For the minority party in a town strategic entry considerations tend to lead to the nomination of a number of candidates equal to the number of seats they expect to win plus one.

There is, however, one potential reason for parties to over-nominate. In Connecticut, if petitioning candidates are members of a political party, their votes apply to their respective party's cap on seats. For example, in a district where the Democrats are a minority, the party may seek to nominate the maximum number of candidates to avoid any competition with petitioning 'mavericks' who could capture the seats in place of the official party nominees. If a petitioning candidate is registered as a member of a political party, they are automatically in competition for that party's seat(s). In 2003, the town of Canterbury had two Republican candidates, one Democrat, and two petitioning candidates running for the town's three council seats (see Table Two). The petitioning candidates each edged out the Republicans, and since both petitioning candidates were registered as members of the Republican Party, they received the party's two seats. The Democratic candidate, with less than nine percent of the vote, received the third seat. Thus, in cases where there are strong petitioning candidates, the electoral rules can lead to some rather bizarre results.

## Table Two

| Name | Party | Votes | Vote \% | Winner? |
| :--- | :--- | ---: | ---: | :---: |
| Dupont, Sr. | Republican | 716 | $20.0 \%$ | No |
| Droesch | Democrat | 308 | $8.6 \%$ | Yes |
| Santoro | Petitioning | 858 | $24.0 \%$ | Yes |
| Nerell | Republican | 759 | $21.2 \%$ | No |
| Galasyn | Petitioning | 935 | $26.1 \%$ | Yes |

*Source: Connecticut Office of the Seccretary of the State

The party's incentive to run the maximum number of candidates, however, can have a negative impact on their results. Take the case of Ledyard. This is a nine seat council, and neither party can win more than six seats (or run more than six candidates). There is a very narrow partisan divide in Ledyard, and in 2003 each party ran six
candidates. The Democrats, while receiving a slim majority of the vote, won a minority (four) of the seats. Table three shows these results. Note that if the Democratic voters had been able to effectively coordinate, the party could have easily won a majority of the seats.

Table Three

| Candidate | Party | Votes | Vote \% | Winner? |
| :--- | :--- | ---: | ---: | :--- |
| Jones | Republican | 2180 | $9.5 \%$ | Yes |
| Allyn, Jr. | Republican | 2056 | $9.0 \%$ | Yes |
| Williams | Republican | 1884 | $8.3 \%$ | Yes |
| Lozier | Republican | 1830 | $8.0 \%$ | Yes |
| Juber | Republican | 1812 | $7.9 \%$ | Yes |
| Frickman | Republican | 1567 | $6.9 \%$ | No |
|  | Total: | 11329 | $49.6 \%$ |  |
| Holdridge | Democrat | 2416 | $10.6 \%$ | Yes |
| Reynolds | Democrat | 2156 | $9.4 \%$ | Yes |
| Wadecki | Democrat | 2015 | $8.8 \%$ | Yes |
| Graebner | Democrat | 1834 | $8.0 \%$ | Yes |
| Riccioli | Democrat | 1557 | $6.8 \%$ | No |
| Kotecki | Democrat | 1529 | $6.7 \%$ | No |
|  | Total: | 11507 | $50.4 \%$ |  |

*Source: Connecticut Office of the Secretary of the State

Thus, political parties in Connecticut municipal elections face considerable strategic challenges. First, if they under-nominate, this allows petitioning candidates to have a party label on the ballot. Second, even if they nominate a full slate of candidates, they are in competition with any petitioning candidates from their own party. Finally, if they nominate a full slate and there are no threats from petitioning candidates for either the party label or votes, over-nomination can hinder their prospects of winning a majority of the seats, despite winning a majority of the votes.

## Hypotheses

This study focuses exclusively on municipalities in Connecticut that have pure at large election for their town councils. Less than one-quarter of the municipalities in the
state have single member districts, multi-member districts, or a mixed system. These systems come in several different forms and present considerable methodological challenges. While future investigation is indeed warranted in this area, we focus on only those municipalities that use the limited vote.

Since there are fewer wasted votes in LV than SMP systems we expect voter turnout to generally be relatively high compared to turnout in SMP elections. Also, since these elections in Connecticut are partisan, we expect that the more competitive the election the higher the turnout will be.
$\mathrm{H}_{1}$ Voter turnout in LV town council elections will be relatively high.
$\mathrm{H}_{2}$ The more competitive the election the higher the turnout will be.
Given the semi proportional nature of the LV system we are examining it is our expectation that the level of disproportionality as measured by the disproportionality index (Gallagher's least squares index) will be relatively low, somewhere between that found for SMP and PR systems:
$\mathrm{H}_{3}$ Disproportionality in the LV towns should be relatively low.
In terms of representation it is our expectation that under represented groups such as women will be well represented on town councils using LV. District magnitude is also a key factor in gender representation. Since women tend to do well in local elections, especially proportional and semi-proportional ones:
$\mathrm{H}_{4}$ Women will be represented on town councils using LV in higher proportions than they are in the State Legislature elections, in which SMP is applied.
$\mathrm{H}_{4.1}$ The representation of women on local councils will vary directly with the size of the council.

Furthermore, given the limited nomination component of the election, it is our expectation that independent candidates and third parties will be able to win seats, particularly on larger councils. The threshold of inclusion is extremely low due to the limited nomination, but the threshold of exclusion will vary inversely with the size of the council.
$\mathrm{H}_{5}$ Independents and third parties will be better represented on larger LV councils than on small ' M ' LV councils.

## Turnout and Competitiveness

The level of participation under the limited vote remains a critical issue. For the 127 towns in our sample that use the limited vote, turnout ranges from 16.9 percent to 66.1 percent with both a mean and median at 44 percent. Less than one-third (29.1\%) of these towns equaled or exceeded a fifty percent turnout rate. Considering that the state ranks among the top few in wealth and education and in voter turnout in Presidential and gubernatorial elections this is rather surprising.

Connecticut's disappointing turnout in local elections is all too often thought of as the fault of the voters, their lack of dedication, commitment to democracy, declining social capital, or just plain laziness. As Mark Franklin (2003) demonstrated in his recent book on voter turnout in democratic countries, rather than blaming the voters we should look at the elections themselves to see if they have been manipulated into virtual irrelevance for the voters by self-serving parties and politicians. As noted above, the electoral laws for the towns of Connecticut, established by the State legislature, employ the limited vote. This type of election is usually only used in non partisan races. Almost unique among the states, Connecticut employs it in partisan elections. This minimizes
competition, making it easy for the local political party caucuses to handpick the councils and minimize any real competition.

We have systematically examined voter turnout in 127 Connecticut towns and found that, as is the case elsewhere, higher voter turnout is significantly correlated with the competitiveness of the election. We have measured competitiveness as the difference between the Democratic and Republican Party percent of the votes in a town. In approximately one-third of the towns (33.1\%) one of the two major parties did not nominate a full slate of candidates. The difference in turnout for competitive and noncompetitive races in our town elections is on the order $6 \%-7 \%$ (a considerable difference given the $44 \%$ average turnout rate). For those towns where we have designated the system as competitive (less than a $10 \%$ difference in the votes for the two major parties) the average voter turnout was $47.7 \%$ while for the less competitive towns the turnout was only 41.4. These difference are statistically significant $(\mathrm{F}=11.4 \mathrm{p}<.001)$. Across Connecticut, the real elections occur in town party caucuses rather than on election day. The parties select the candidates, divide up the spoils and effectively leave the public with little choice. No matter how many votes the leading party gets it is limited to two-thirds of the seats and no matter how few votes the second place party obtains it is virtually assured of winning up to a third of the council seats

Not only does the existing method distort the vote, it is so poorly understood that few people have a clue as to how their vote will be counted. Confusing local election laws, lack of real choices, and limited competition provide a recipe for low voter turnout, especially since this has been repeated over many years and several age cohorts.

## Table Four

| Town elections | Average \% <br> turnout | $\mathrm{N}=$ | minimum | maximum | Standard <br> deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| uncompetitive | 41.4 | 52 | 16.9 | 65.7 | .117 |
| competitive | 47.7 | 75 | 33.4 | 66.1 | .081 |
| total | 44.0 | 127 | 16.9 | 66.1 | .108 |
| $\mathrm{F}=$ <br> $\mathrm{p}<.001$$\quad 11.4$, |  |  |  |  |  |

Competitiveness measured by $\%$ difference in votes between Democrats and Republicans. (<=10\% vs. > 10\%))

Not surprisingly, turnout is higher in those towns in which district magnitude is only three $(45.4 \%$ turnout, $\mathrm{n}=76)$ compared to those towns with more seats being contested ( $\mathrm{n}=51$, average turnout of $41.8 \%$ ). This may be because the races are clearer to voters and or because the race for first selectman in the three seat councils is more high profile than is the case in other towns.

## Disproportionality

Of critical concern to us here is the degree to which the limited vote, as a "semiproportional" system actually produces results which are representative of the votes cast. The most common way of calculating disproportionality is the Gallagher least squares index. The higher the score, the greater the distortion in the relationship between seats and votes.

Overall, calculation of the disproportionality index by town in Connecticut produces an average of 11.0 with a median of 11.4: a level which is relatively high even for a plurality SMD election. If we look at the disparities, the Democrats percentage of seats exceeded their vote percent in $57.9 \%$ of the towns. For the Republicans the distribution is exactly $50-50$. For the other parties, of the 44 towns in which they
competed, their seat total exceeded their vote total in only 2 (4.5\%) but otherwise was below their vote total in the remaining $42(95.5 \%)$. Thus, in any given town the level of disproportionality between seats and votes is relatively high even where only two parties compete. Of course, this is partly a function of the relatively low district magnitude (M). The system may actually be even more distorted than this figure indicates in that it discourages third parties and independent candidates, artificially leaving two-party races even where competition might otherwise be intense. The limited nomination/limited vote virtually assures that the two major parties are represented, insuring bipartisan councils regardless of the distribution of the vote.

Republicans and Democrats each won seats in all but one town ( $\mathrm{n}=127$ ). Third parties and/or independents competed in only 44 or just over one-third of the towns ( $34.6 \%$ ). They won seats in only seven towns, $15.9 \%$ of those in which they competed in and only $5.5 \%$ of the total towns. Overall, the Democrats won 310 seats (51.3\%), Republicans 282 (46.7\%) and others only 12 (2\%). In total votes (in our 127 town sample) the Democrats won 921,583 (50.15\%) and the Republicans 815, 869 (44.38\%) and the independents and other party candidates 104,746 (5.47\%) of the total vote. Statewide, the distribution of seats between the parties is fairly consistent with their statewide votes, but the disparities from town to town are considerable. One way or the other, the major parties tend to balance each other out, but only in the aggregate.

## Access: The Threshold of Exclusion

How difficult is it for a party or candidate to win one or more seats on a town council in Connecticut? The threshold of exclusion can be a very useful statistic in making this assessment. The threshold of exclusion $\left(\mathrm{T}_{\mathrm{E}}\right)$, is "the maximum support that
can be attained by a party while still failing to win even one seat" (Grofman, et al. 1999: 318). First developed by Rae, Hanby and Loosemore (1971: 480), they "consider an electoral district in which n parties compete for m seats and focus on a party that wins a proportion of the vote v , leaving a proportion of $1-\mathrm{v}$ to its $\mathrm{n}-1$ adversaries." They go on to define the threshold of exclusion as "the largest value that v can reach without assuring such a party at least one seat." They apply this approach to four different types of electoral systems, SMP, D'Hondt highest averages PR, St. Lagüe highest-averages PR representation, and largest-remainder PR representation. Rush and Engstrom (2001:4142) extend the application of this concept to Limited Vote Systems (LV). They state that the threshold of exclusion "identifies the percentage of the voters in a particular election that a group sharing the same candidate preference must exceed in order to elect that candidate with no assistance whatsoever from other voters" (Rush and Engstrom, 2001: 43). They present a formula [(number of votes)/(number of votes) + (number of seats)] Number of votes here refers to the number of votes a voter can cast in the limited vote election. These votes must be cast for different candidates rather than being cumulative and is always less than the total number of seats. (2001:41) and argue that the threshold depends on both the number of seats to be filled and the limitation on votes. This approach is also accepted by Bowler, Donovan and Brockington (2003: 26). However, no proofs are presented by either set of authors.

In fact, we have noted a significant anomaly in this literature. Grofman et al argue that the threshold of exclusion under the single non transferable vote (SNTV) is $1 /(m+1)$. SNTV is one form of the limited vote and we argue that the formula for $\mathrm{T}_{\mathrm{E}}$ developed by Grofman et al for SNTV also applies to the limited vote. In essence, this is
the same formula that is applied to D'Hondt systems by Rae et al, (1971:485) and cumulative voting (1/ $(1+\mathrm{m})$ ) by Rush and Engstrom (2001: 42), and both of these by Bowler et al (2003:26). We argue that this same formula applies to limited vote systems regardless of the number of votes that a voter can cast. The threshold of exclusion in limited vote systems is thus a function of district magnitude and not of the number of votes per elector. Hence, as district magnitude increases the threshold of exclusion decreases. The number of votes each voter can cast is irrelevant. ${ }^{2}$

Since the number of councilors elected in Connecticut towns tends to be relatively low (3 to 15) with a mode of 3 and a mean of 4.8, the threshold of exclusion is relatively high in limited vote towns. With a mean of $20 \%$, a median of $25 \%$, and a mode of $25 \%$ (applying to 76 of 127 towns) competition for entry is limited. Hence it should be relatively difficult for small parties or independents to win seats in most towns. Not so for the two major parties. The Democratic Party vote was less than the threshold in only 13 of the 127 towns in our sample. The same is true in only four cases for the Republicans. Other parties ran candidates in only 44 of the 127 towns and reached or exceeded the threshold of exclusion $\left(\mathrm{T}_{\mathrm{E}}\right)$ in only ten of them. For third parties and

[^1]independents there are very few cases in which the threshold of exclusion was exceeded and they only managed to win just over two percent of the council seats state-wide.

On the other hand, the threshold of representation (inclusion) is the minimum number of votes a candidate can receive under the best possible circumstances for the distribution of the vote and still win a seat. Recall that according to Connecticut statutes, the limited nomination applies. That is, no party may nominate more candidates than the equivalent of two-thirds of the seats and may not win more than two-thirds of the seats. Thus, the threshold of inclusion is theoretically a single vote. That is, if in a 9 seat council the candidates of party "A" finish one through six in terms of votes, they are limited to six seats. Any remaining candidate or candidates from another party or an independent receiving the equivalent of the threshold of exclusion plus one vote would be assured election. If no second-place party accomplishes that, the distribution of the remaining seats is strictly a case of the largest number of votes. The next-place candidate from any party other than ' A ' wins the next seat regardless of vote total as long as it is higher than that of any other remaining candidate(s). Thus, in a two-party race, the losing party is virtually guaranteed approximately one-third of the seats. If other parties or independent candidates are involved, the three remaining seats would go to the top three candidates in order of votes received. Theoretically, the last seat could be awarded to a candidate winning only one vote. The system thus guarantees that every council will have more than one party represented.

## Strategic Entry and Coordination

We must also consider the strategic entry situation in which parties nominate either a full or partial set of candidates based on their expectations of the distribution of
support and the likely outcomes. We would expect that parties would nominate fewer than the possible number of candidates in races that are less competitive and full slates where the races are more competitive. We constructed a measure of this strategic entry and coordination which is the percentage of the combined total the Democratic and Republican candidates presented in relation to the total possible candidates they could nominate. For example, in a nine-seat council each party could nominate up to six candidates. Therefore, the denominator would be twelve. We then correlated this with the actual competitiveness of the race using our measure of the disparity in percent votes between Democrat's and Republican's slates of candidates. The Pearson $r$ for these two variables is $-.535(\mathrm{p}<.001, \mathrm{n}=127)$. Considering that our dependent variable is not fully continuous because of the limited number of seats and hence outcomes, we also use a nonparametric test, Spearman's rho. The correlation is even stronger, rho $=-.554$, $\mathrm{p}<.001$. That is, as competitiveness decreases, the reliance on strategic entry and coordination increases and the weaker party is less likely to nominate a full slate of candidates.

## Gender Representation

Although we lack the data on the representation of ethnic and racial minorities on councils under LV we have used the success of another underrepresented group, women, as a measure of equity and opportunity. Women are in relative terms well-represented in Connecticut in its delegation in the U.S. House of Representatives, holding two of the state's five seats, the state legislature where women hold 55 of 187 seats (29.4\%) ranking the State 12th among the 50 states, and the Governor's office (although the current governor was elected as Lieutenant Governor and acceded to the office after the
resignation of Governor Rowland). In the 127 limited vote towns included in our data set, women won $169(27.7 \%)$ of the 610 seats. Given the local nature of these jobs and the relatively low costs of campaigning it is surprising that the numbers are not higher.

We must first look to the nominating process for some explanation of these findings. The nominating process, very much dominated by local party caucuses, is critical. Democrats nominated no women candidates for town council in 54 (42.5\%) of the LV towns and Republicans failed to nominate a single woman in $62(48.8 \%)$ of them. In those towns in which women were nominated, in most cases a single female candidate was put forth (in $67 \%$ of the 73 towns for the democrats and $74 \%$ of the 65 for the Republicans). The picture is a bit brighter when we look at elected women. At least one Democratic woman council member was elected in about half (48.8\%) of the towns and Republican women candidates were elected in $43.3 \%$ of the towns. Overall, regardless of major party, at least one woman councilor was elected in $71.7 \%$ of the towns. Thus, most towns have at least one female serving on their council.

Further demonstrating the control exercised by the party and the importance of the nomination process in the party caucuses for both the Democrats or Republicans is the fact that of the 783 candidates these two parties nominated, 592 ( $75.6 \%$ ) were elected. This is clearly related to the limited nomination system, strategic coordination, and strategic entry exercised by the parties. Similarly, of the 196 female candidates nominated by either the Democrats or Republicans 153 (78.1\%) were elected. That is, women nominated by their parties were actually slightly more likely to be elected than were their male counterparts, $74.8 \%$ of whom were elected. Finally, it is notable that in all 91 towns in which major parties nominated a woman candidate, at least one woman
was elected. Getting nominated is obviously the key for women getting elected. We would argue that the same most likely applies to minority candidates.

The district magnitude (M), consistent with the literature on gender representation, may also play an important role in that women are expected to have better chances of being nominated and elected in those towns in which the district magnitude (size of the council) is larger. We compared those towns with a council of only three members with those councils with more than three members to test this hypothesis. All but one (97\%) of the 36 towns in which there were neither Democratic nor Republican women candidates nominated had councils with only three councilors. In the ' $M$ ' $=3$ towns nearly half of the $76(46 \%)$ had no major party women candidates. In fully $98 \%$ of the 51 towns having councils with more than three members there was at least one women candidate nominated (and elected) by at least one of the two major parties.

## Table Five

Nomination and Election of Candidates

| Party $\rightarrow$ | Democrats n(\%) | Republicans n (\%) | Total* n (\%) |
| :--- | :--- | :--- | :--- |
| Total Nominated | 391 | 392 | 783 |
| Total Elected | $310(79.3)$ | $282(71.9)$ | $592(75.6)$ |
| Women Nominated | $109(27.9)$ | $87(22.2)$ | $196(25.0)$ |
| Women Elected | $86(79.0)$ | $66(77.0)$ | $153(78.1)$ |
| Men Nominated | $282(72.1)$ | $30577.8)$ | $587(75.0)$ |
| Men elected | $224(79.4)$ | $215(70.4)$ | $439(74.8)$ |

*excludes other party candidates
This is also related to the level of competition. Races in the towns having three seat councils tend to be less competitive than in towns having larger councils. The greater the competition, the more likely major parties are to nominate female candidates ( $\mathrm{p}<.05, \mathrm{~F}=5.5$ ) to balance their tickets or in response to their opponents doing so. As noted above, nomination leads to a high probability of election. Hence, women are
elected where the parties see a positive incentive to nominating them while not detracting from the opportunity to nominate their own local party leadership.

## Conclusions

This study expands our understanding of alternative electoral systems in the United States. In particular, we have addressed three major topics. First, as is the case with Connecticut, the peculiarities of electoral laws can have a significant impact on the effectiveness of local (in this case LV) systems, affecting voter turnout and party competition. The limited vote/limited nomination system employed in Connecticut in partisan elections greatly strengthens the role of the local party caucus while weakening the role of the voter in the selection of representatives. The name of the game and the real competition involves getting nominated by a major party rather than the election per se. Along these lines, the role of third parties and independent candidates is greatly constrained. Second, despite the potential shortcomings of the design of elections in Connecticut, women are relatively well-represented in localities that use the limited vote. However, this is a function of the nominating process, district magnitude, and competitiveness rather than a direct effect of the electoral format. The same probably applies to the selection and election of minority candidates. Finally, from a methodological perspective, previous studies have been off the mark in their theoretical approach to the threshold of exclusion in LV systems. Rather than this threshold being dependent on the number of votes each voter can cast, it is in fact directly related to the district magnitude. This has important implications for the design of LV systems which have minority representation as one of their goals.

It is important for scholars to continue to study the design and effectiveness of alternative electoral systems in the United States. In 1994, the US Supreme Court rejected an African American group's claim that the at-large sole commissioner electoral system of Bleckley County, GA, was a violation of the 1965 Voting Rights Act. While a majority of justices agreed that the electoral system of Bleckley was not in conflict with the VRA, their written opinion was a remarkably candid plea for Americans to recognize the fundamental institutional constraints of electoral systems in the US. Writing for the majority, Justice Anthony M. Kennedy argued, "Geographic districting and other aspects of electoral systems that we have so far placed beyond question are merely political choices" (Holder v. Hall, 1-C). Justice Kennedy's criticism of single member district plurality electoral systems is not without precedent. Indeed, countless scholars have criticized the single-member district (SMD) plurality system for failing to live up to the ideals of representative democracy. Given the Supreme Court's growing opposition to redistricting on the basis on race (see Shaw v. Reno) and low levels of women's representation, it is important to consider the potential benefits of alternative voting systems in the US. This study has contributed to this understanding, but it highlights the potential complexities that arise when enacting electoral reforms.

## Works Cited

Amy, Douglas J. 2002. Real Choices / New Voices: How Proportional Representation Elections Could Revitalize American Democracy. New York: Columbia University Press.

Barber, Kathleen. 2000. A Right to Representation: Proportional Election Systems for the Twenty-First Century. Columbus: Ohio State University Press.

Bowler, Shaun, Todd Donovan, and David Brockington. 2003. Electoral Reform and Minority Representation: Local Experiments with Alternative Elections. Columbus, OH: The Ohio State University Press.

Brockington, David, Todd Donovan, Shaun Bowler, and Robert Brischetto. 1998. "Minority Representation under Limited and Cumulative Voting." Journal of Politics 60(November): 1108-25.

Butler, David, and Bruce E. Cain. 1992. Congressional Redistricting: Comparative and Theoretical Perspectives. New York: Macmillan.

Butler, David, and Iain McLean. 1996. "The Redrawing of Parliamentary Boundaries in Britain." In Fixing the Boundaries: Defining and Redefining Single-Member Electoral Districts, ed. Iain McLean and David Butler. Aldershot, England: Dartmouth Publishing.

Courtney, John C. 2004. Elections. Vancouver: University of British Columbia Press.
Cox, Gary W. 1997. Making Votes Count: Strategic Coordination in the World's Electoral Systems. Cambridge: Cambridge University Press.

Engstrom, Richard L. 1992. "Modified Multi-Seat Election Systems as Remedies for Minority Vote Dilution." Stetson Law Review 21: 743-70.

Engstrom, Richard L., and Michael D. McDonald. 1982. "The Underrepresentation of Blacks on City Councils: Comparing the Structural and Socioeconomic Explanations for South/Non-South Differences." The Journal of Politics 44(4): 1088-99.

Featherman, Sandra A. 1992. "Barriers to Representing Women and Blacks in Pennsylvania: The Impacts of Demography, Culture, and Structure." In United States Electoral Systems: Their Impact on Women and Minorities, ed. Wilma Rule and Joseph F. Zimmerman. New York: Praeger.

Franklin, Mark. 2003. Voter Turnout and the Dynamics of Electoral Competition in Established Democracies since 1945. Cambridge, U.K.: Cambridge University Press.

Grofman, Bernard, Sung-Chull Lee, Edwin A. Winckler, and Brian Woodall, eds. 1999. Elections in Japan, Korea, and Taiwan under the Single Non-transferrable Vote, Ann Arbor, MI, University of Michigan Press.

Holder v. Hall. 1994. 512 U.S. 874.
Kousser, J. Morgan. 1998. "Reapportionment Wars: Party, Race, and Redistricting in California, 1971-1992." In Race and Redistricting in the 1990s, ed. Bernard Grofman. New York: Agathon Press.

Lijphart, Arend. 1999. Patterns of Democracy. New Haven: Yale University Press.
Lyons, W. E. 1970. One Man, One Vote. Toronto: McGraw-Hill.
Norris, Pippa 2002. Democratic Phoenix. Cambridge: Cambridge University Press.
Powell, G. Bingham. Elections as Instruments of Democracy. New haven: Yale University Press.

Rae, Douglas, Victor Hanby, and John Loosemore. 1971. "Thresholds of representation and thresholds of exclusion." Comparative Political Studies 3: 479-488.

Rush, Mark E., and Richard L. Engstrom. 2001. Fair and Effective Representation: Debating Electoral Reform and Minority Rights. New York: Rowman and Littlefield Publishers.

Shaw v. Reno. 1993. 509 U.S. 630.
Still, E. 1984. "Alternatives to Single Member Districts." In Minority Vote Dilution, ed. C. Davison. Washington, D.C.: Howard University Press.

Taagepera, Rein. 1973. "Seats and Votes: A Generalization of the Cube Law of Elections." Social Science Research 2: 257-75.

Weaver, Leon. 1984. "Semi-Proportional and Proportional Representation in Local Governments in the United States." In Electoral Laws and Their Political Consequences, ed. A. Lijphart and B. Grofman. New York: Praeger.


[^0]:    1 An earlier draft of this paper was prepared for delivery at the 2006 annual meeting of the Southern

[^1]:    2 Contrary to what has generally been asserted in the literature, the number of votes a voter can cast in the limited vote system has no relationship to the threshold of exclusion. For example, using the formula suggested by Rush and Engstrom (2001), Bowler et al (2003), and Grofman et al (1999) (v/(v + $\mathrm{m})$ ) for a three seat constituency in which each voter can cast one vote (SNTV) produces a threshold of exclusion of 25 percent. However, in the same three seat constituency in which each voter casts two votes their formula produces a threshold of exclusion of 40 percent. However, we argue that since each voter can only cast one vote for any given candidate, the threshold of exclusion in fact remains the same ( $25 \%$ ) as for SNTV. In the above mentioned example, any candidate receiving $25 \%+1$ vote would in fact be guaranteed winning a seat. The $40 \%$ threshold suggested by their formula would guarantee any candidate a seat rather than being the maximum percent which would deny them one. As noted above, the number of votes a voter can exercise, as long as it is equal to $m-1$ or less ( $\mathrm{m}-2 \ldots$ ), has no influence on the threshold of exclusion. We have run a series of simulations the results of which are consistent with our interpretation.

