

## Patriotism, Pigskins, and Politics: An Empirical Examination of Expressive Behavior and Voting

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**Abstract:** In this paper we use data collected from nearly 4,000 single-family residences in Auburn, Alabama to investigate empirically whether specific political expressiveness (displaying a candidate's election sign in one's yard), general socio-political expressiveness (flying an American flag on either Memorial Day or Independence Day), or non-political expressiveness (displaying support for Auburn University's football team outside one's home) is related to the likelihood that at least one resident voted in the national/state/local elections held November 7, 2006. Controlling for the assessed value of the property and length of residential ownership, we find strong evidence that all three measures of expressive behavior are statistically significant predictors of a higher likelihood of voting than occurred at residences showing no evidence of these expressive behaviors. These findings suggest that voting may be more completely understood not as politically-expressive behavior but, rather, as a generally expressive tendency that happens on occasion to be manifested in a political context. That is, an understanding of why some people vote and others do not may require an understanding of why some individuals are more expressive (generally speaking) than others.

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# Patriotism, Pigskins, and Politics: An Empirical Examination of Expressive Behavior and Voting

“But by the logic of expressive voting, voting behavior at the individual level is extremely sensitive to what one sees as noble which is in the eye of the beholder.”

Clark and Lee (2006; 28)

## Introduction

The recognition that voting may reflect “expressive” motives (Fiorina, 1976; Brennan and Buchanan, 1984; Brennan and Lomasky, 1993; Schuessler, 2000a, b; Engelen, 2006) provides a potentially compelling explanation of the fact that large (small) numbers of citizens vote in national and state-level (local) elections even though the rational actor model of voting as originally argued (Downs, 1957; Tullock, 1967) suggests that relatively few (many) will vote in those contexts. However, while the theory of expressive voting may be intuitively appealing, it has not gained significant empirical traction. For the most part, the empirical evidence in support of expressive voting has come from experimental settings (Carter and Guerette, 1992; Fischer, 1996; Tyran, 2004) or aggregate analysis (Faith and Tollison, 1990; Sobel and Wagner, 2004; Ashworth et al., 2006). Only 3 empirical studies that we are aware of (Jones and Hudson, 2000; Kan and Yang, 2001; Copeland and Laband, 2002) explicitly link expressive behaviors/considerations and voting at the individual level.

In our view, the observation by Clark and Lee that leads off this paper highlights one of the difficulties that must be overcome in order to develop compelling empirical evidence in support of expressive voting - - capturing in readily observable empirical metrics what it is that

individuals view “as noble.” But, in fact, a good bit of what individuals regard as important in their personal lives routinely is on display and therefore readily is observable by researchers. Individuals express themselves about a wide spectrum of different “noble” aspects of their lives, from their child’s performance in school, to their feelings about religion, evolution, their local sports team(s), political figures, abortion, the environment, music, drug use, and the Hard Rock Café in Amsterdam. They express their feelings in a variety of ways - - messages or images on the shirts, hats and other apparel they wear, putting bumper stickers on the vehicles they drive, writing letters to the editor of newspapers, calling in to radio talk shows, postings on blogs, displaying yard signs, and so on. The empirical difficulty becomes apparent when one attempts to correlate the observed expressive behavior(s) of a specific individual with the observed voting behavior *of that same individual*, at least in the context of developing a statistically compelling sample size.

We offer a novel way to hurdle this empirical ravine, by matching several different expressive behaviors observed at private residences in Auburn, Alabama to voting in the November 7, 2006 general election by individuals who owned/lived in these residences. Thus, our unit of analysis is the residence, not each individual within the residence. Specifically, we used data collected from two overlapping samples (a small sample,  $n = 1,512$  and a large sample,  $n = 3,963$ ) of single-family residences in Auburn, Alabama to investigate empirically whether specific political expressiveness (displaying a candidate’s election sign in one’s yard), general socio-political expressiveness (flying an American flag on either Memorial Day or Independence Day), or non-political expressiveness (displaying support for Auburn University’s football team outside one’s home) is related to the likelihood that at least one resident voted in the national/state/local elections held on November 7, 2006. Controlling for the assessed value of

the property and the length of residential ownership, we find strong evidence that all three measures of expressive behavior are statistically significant predictors of a higher likelihood of voting than occurred at residences showing no evidence of these expressive behaviors.

### Methods and Data

The empirical question of interest is whether the likelihood that an individual votes (political expressiveness) is statistically related to whether: (1) (s)he engages in specifically political expressiveness by publicly displaying a sign supporting a candidate for public office, (2) (s)he engages in what we term general socio-political expressiveness by publicly displaying the American flag on national holidays (Memorial Day and/or Independence Day), and (3) (s)he engages in decidedly non-political expressiveness by publicly displaying to the rest of the world his/her support for Auburn University's football team. To make this linkage at the individual level requires the researcher to directly question each of the individuals within his sample about whether and to what extent they may engage in specific behaviors. One advantage to doing so is that information about a wide range of survey respondents' different behaviors can be obtained, whereas trying to obtain that information from direct observation may be prohibitively costly. However, a survey of this sort is subject to low sample response and possible sample response bias. An alternative approach is to record observed displays of expressive behavior that can be attached to meaningful sample units, such as residences, and link those expressive displays to voting behavior traceable to the same residences. We pursued the latter methodology.

The City of Auburn is located in Lee County, Alabama. The county government maintains a database that includes information about voter registration (if and when a specific individual registered to vote) and the most recent election the individual cast his/her vote in.

Individuals are identified by name and by address. We obtained this database in January 2007, since at that point in time the information recorded for the most recent election participated in was the November 7, 2006 general election. Lee County also has an on-line GIS database that permits identification of specific residences located anywhere within the City of Auburn and that includes information about the owner(s) and assessed value of each property as well as when the current owner purchased the property. This means that it is possible to link information on voting by individuals to information about those individuals' residences.

On Memorial Day and Independence Day, 2006, we drove the streets of Auburn's neighborhoods located south of Interstate 85 (our small sample, N=1,512), and recorded whether or not an American flag was displayed at each residence. In September, with the collegiate football season well underway, we drove the streets of Auburn's neighborhoods both south and north of Interstate 85 (our large sample, N = 3,963) and recorded whether or not there was a public display of support for Auburn University's football team. Auburn residents display their feelings of support for the Auburn University football team in a variety of different ways that can be observed without direct/personal contact with the individual: (1) flying an AU flag, (2) affixing an AU pom-pom on one's mailbox, (3) affixing an AU sticker on one's mailbox, (4) placing an AU sign in one's yard, (5) placing an AU windmill in one's yard, (6) placing an inflated figure of Aubie (AU's school mascot) in one's yard. Finally, during the 3 days prior to the November 7, 2006 elections, we drove the streets of Auburn's neighborhoods (large sample), and recorded whether or not there was a publicly-displayed yard sign supporting one or more of the candidates running for public office in the coming election.

Within each neighborhood, the sampling was 100 percent. The only exclusions were houses that had 'For Sale' signs in the yard, since including them would have admitted the possibility that the voting behavior linked to the residence was not for the same individuals as the pro-Auburn University football behavior. Not all neighborhoods were included in our sample, because we did not wish to complicate our analysis by including renters, whose behavior may vary significantly from that of owners. In addition, we did not include neighborhoods with restrictions on displays of political signage. For our large (small) sample, this yielded a starting sample of approximately 4,500 (1,700) single-family, detached residences located in most of the neighborhoods in the north, south, and central (south) parts of the City of Auburn.

We augmented this data with information for each residence on the owner(s), year purchased, and 2006 assessed value. Finally, we went through the voter database and recorded whether anyone at that address voted in the elections held on November 7, 2006. We deleted from our samples those properties for which a purchase date was not available. In a number of instances, it became clear that a property located in a residential neighborhood was occupied by someone other than the owner (who was identified in the GIS database as owning a different property, confirmed by information from the voting database). These rented properties also were deleted from our samples. Aside from sample size, the only thing that distinguishes our small sample from our large sample is that the former includes information about the homeowners who flew the American flag during Memorial and/or Independence Days while the latter does not. Sample statistics are reported in Table 1.

Table 1 about here

As a general characterization, homes in Auburn that are located south of Interstate 85 (our small sample) are newer and more expensive, on average, than homes located north of I-85. Both of these aspects are confirmed by the data - - the average assessed value in the larger, more inclusive sample is approximately 15 percent lower than in the small sample and the average length of ownership is 25 percent greater in the large sample than the small sample. Homeowners at just over 17 percent of the residences in our small sample flew the American flag on either Memorial Day or Independence Day. In the large (small) sample, approximately 12 (14) percent of the homes were observed to have at least one political sign on the property just prior to the November 2006 elections. A little more than 7 percent of the homes in our large sample showed support for Auburn University's football team, in terms of the observable indicators that we recorded. Finally, approximately two-thirds of the residences in our sample were characterized by at least one individual who voted in the November 7, 2006 general elections.<sup>1</sup>

We used a logistic regression procedure to estimate different specifications of the following model:

$$\begin{aligned} \text{Vote2007}_i = & \beta_0 + \beta_1 \text{AssessedValue}_i + \beta_2 \text{Years Owned}_i + \beta_3 \text{Flew Flag}_i + \\ & \beta_4 \text{Dem Yard Sign}_i + \beta_5 \text{Rep Yard Sign}_i + \beta_6 \text{Either Yard Sign}_i + \\ & \beta_7 \text{Loves Auburn}_i + \beta_8 \text{Mult. Expressive}_i + \beta_9 \text{No Expressive}_i + \epsilon_i \end{aligned}$$

Where  $\text{Vote2007}_i = 1$  if at least one resident of property  $i$  voted in the November 7, 2006 elections, 0 otherwise;

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<sup>1</sup> Not all homeowners had registered to vote and, of those that did, some were recorded as having voted previously to, but not on, November 7, 2006.

- AssessedValue<sub>i</sub> = the 2006 assessed value of property i;
- Years Owned<sub>i</sub> = the number of years property i has been owned by the current owners, calculated as 2006 minus the year the property was acquired by the current owner(s);
- Flew Flag<sub>i</sub> = 1 if an American flag was displayed at residence i on Memorial Day or on Independence Day 2006, 0 otherwise;
- Dem Yard Sign<sub>i</sub> = 1 if at least 1 yard sign supporting a Democratic Party candidate in the November 2006 election was displayed at residence i, 0 otherwise;
- Rep Yard Sign<sub>i</sub> = 1 if at least 1 yard sign supporting a Republican Party candidate in the November 2006 election was displayed at residence i, 0 otherwise;
- Either Yard Sign<sub>i</sub> = 1 if at least 1 yard sign supporting either a Democratic Party candidate or a Republican Party candidate in the November 2006 election was displayed at residence i, 0 otherwise;
- Loves Auburn<sub>i</sub> = 1 if there was a pro-Auburn University display (at least one of the six indicators mentioned previously) observable to non-residents, 0 otherwise;
- Mult. Expressive<sub>i</sub> = 1 if more than one type of expressive behavior was observed at residence i, 0 otherwise;
- No Expressive<sub>i</sub> = 1 if none of the three types of expressive behavior was observed at residence i, 0 otherwise; and
- $\varepsilon_i$  = the random disturbance term.

Based on the findings of previous researchers, we expect the likelihood that at least one person living at the property voted in the November 7, 2006 elections to increase with the

assessed value. Assessed value serves as a proxy for income/wealth/education of the owner(s), which have been shown empirically to be linked to an individual's propensity to vote (Ashenfelter and Kelly Jr., 1975; Kan and Yang, 2001; Copeland and Laband, 2002). We also expect the likelihood that at least one person living at the property voted in the November 7, 2006 elections to increase with the length of time the current owners have owned the property, for at least two reasons. First, longer ownership means the owners have a more established stake in the neighborhood, municipal, and state communities; on that basis alone, the individuals will be more likely to vote, in the context of either an instrumentally-motivated model of voting or an expressive voting model, than individuals with less time in their residence/community/state. Second, increasing length of ownership implies increasing age, which has been found to be positively correlated with the likelihood of voting (Kan and Yang, 2001; Copeland and Laband, 2002).<sup>2</sup>

We expect that the likelihood that at least one person from a residence voted in the November 7, 2006 elections will be higher for residences at which an American flag was displayed on Memorial Day and/or Independence Day than those that did not. It has been argued that an individual's decision to vote may be motivated by a sense of civic responsibility (Riker and Ordeshook, 1968; Blais, 2000; Jones and Hudson, 2000) or by feelings of civic pride *qua* group identification (Fiorina, 1976; Nelson and Greene, 2003). Likewise, we expect that the likelihood that at least one person from a residence voted in the November 7, 2006 elections will be higher for residences with one or more yard signs supporting candidate(s) in the upcoming elections than for residences with no political support signs. Again, such expressiveness has

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<sup>2</sup> But for non-confirmatory results on both age and income, see Jones and Hudson (2000).

been argued to reflect the individual's attempt to signal his/her identification/affiliation with a particular group (Nelson and Greene, 2003), in this case either the Democratic Party or the Republican Party.

There is not much guidance from the literature on voting to guide our expectation about the relationship between displays of support for Auburn University's football team (a decidedly non-political form of expressive behavior) and voting in elections (a political form of expressive behavior). The literature on expressive voting has identified linkages between different types of politically expressive behavior and voting (Jones and Hudson, 2000; Kan and Yang, 2001; Copeland and Laband, 2002), but heretofore there has been no suggestion that some individuals may be more expressive than others generally speaking, in a variety of contexts that may or may not be political. Under the circumstances, we are content to let the data reveal if a relationship exists at all and, if so, what that relationship looks like.

In addition, there is no guidance from previous research with respect to the expected impact of observing at least one form of expressive behavior (irrespective of type) on the likelihood of voting, as compared to no observed expressive behavior. Similarly, there is no guidance with respect to the expected impact of observing multiple expressive behaviors on the likelihood of voting.

Our logistic estimation results for the small (large) sample are presented in Table 2 (3).

[Tables 2 and 3 about here](#)

## Findings – Small sample

As expected, we find very sizable, positive, and statistically significant effects of both longevity in residence and assessed value of property on the likelihood of voting. In addition, we find that the likelihood that at least one person from a residence voted in the November 7, 2006 elections was significantly higher if an American flag was flown at the residence on either Memorial Day or Independence Day, if there was a political sign displayed in the yard prior to the elections, and if there was a public display of support for Auburn University's football team.<sup>3</sup> Moreover, we find that if at least one of these 3 types of expressive behavior was observed at a residence (model 3, Any Expressiveness), there was a significantly greater likelihood that at least one member of the family voted in the elections, as compared to residences with none of these three expressive behaviors observed. Finally, as reported in model 4, we find that at residences where at least two (multiple) types of expressive behavior were observed there was a greater likelihood of at least one family member voting than at residences at which only one of the three expressive behaviors (the omitted control category) was observed and that there was a significantly lower likelihood of voting at residences where none of these three behaviors was observed as compared to residences that exhibited one of these three behaviors.

In Table 4 we report relevant odds ratio estimates. We calculate that at residences with at least one political sign in the yard, the likelihood of at least one member of the household voting

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<sup>3</sup> Unfortunately, we do not have information about the voting *choices* made by each individual, we only know whether or not at least one person at each residence voted. But this linkage between voting and displaying signs supporting Democratic and Republican party candidates to public office is highly consistent with the argument that expressiveness reflects group identification/affiliation and signals trustworthiness (Nelson and Greene, 2003), and also reflects the individual's desire to 'cheer' or 'boo' favored or unfavored candidates (Brennan and Buchanan, 1984; Kan and Yang, 2001).

in the November 7, 2006 elections was 2.664 times greater than at residences that did not display a political support sign. In this regard, we found a sizable difference between houses displaying a Republican sign as compared to a Democrat sign, but this difference disappeared in the context of our larger sample. Likewise, we calculate that the likelihood that at least one family member voted was twice as great at residences where the American flag was flown on either Memorial Day or Independence Day than at residences where no flag was flown on those days. Further, the likelihood that at least one member of the household voted was 1.624 times higher at residences that publicly displayed support for Auburn University's football team than at residences that did not show such support. In terms of consolidated findings, we calculate that those households that displayed any of the three expressive behaviors analyzed were 2.4 times as likely to have at least one member who voted than households that did not display any of the three expressive behaviors. Finally, the voting probability was nearly twice (less than half) as high at residences exhibiting at least two (none) of the three types of expressive behavior analyzed as at residences exhibiting one type of expressive behavior.

#### Findings – Large sample

Our findings from the large sample estimation are highly consistent with those of the small sample estimation. Our estimate of the impact of having a political sign in the yard on the likelihood of voting is virtually identical across the two samples. However, in the large sample we no longer observe significantly different impacts between those residences displaying support signs for Republican candidates and those displaying support signs for Democrat candidates. In the large sample, the estimated impact of displaying support for Auburn University's football team is quite a bit larger than the estimated impact from the small sample. Turning to the odds

ratios, we also observe a high degree of consistency across samples. The only notable difference is that the differentially higher probability of voting at residences displaying AU support as compared to residences not showing such support is 1.93 for the large sample as compared to 1.62 for the small sample.

## Discussion

We believe that our empirical findings offer intriguing and compelling new evidence in support of expressive voting. Indeed, our results are all-the-more impressive because there is a strong natural bias working against finding significant results - - the fact that a lot of residences classified as exhibiting no expressive behavior are misclassified, since the residents engage in expressive behavior that we did not code for in our analysis - - e.g., the owners drive vehicles with personalized license plates or bumper stickers on their vehicles, wear neckties or lapel pins with American flags on them, etc. Since nearly two-thirds of the residences in our sample were characterized by at least one individual voting in the November 7, 2006 elections, this failure to correctly identify all of the residences who publicly express support for the Auburn University football team, who are publicly patriotic and/or who publicly displayed some other form of support for one or more political candidates almost certainly means that the estimated impacts reported in Tables 2-4 understate the true impacts.

In one respect, our analysis is quite similar to that of Copeland and Laband (2002), who found strong evidence that the likelihood of voting at the individual level is linked to the incidence of other types of politically-expressive behaviors, such as wearing campaign buttons and making tax donations to the Federal Election Commission. Like these two behaviors, it seems extremely unlikely that the act of putting a political sign that supports a candidate for

public office in one's yard, by itself, will influence the outcome of an election. So we add to the body of evidence linking the act of voting to other forms of politically expressive behavior. But our analysis and findings go considerably further.

Our empirical finding that the incidence of voting is higher at residences with public displays of support for Auburn University's football team may have far-reaching implications for future research on expressive voting. This finding demonstrates a link between politically expressive behavior and non-political expressive behavior. However, in addition to Copeland and Laband (2002), previous researchers who examined linkages between expressive behaviors/considerations and voting at the individual level focused exclusively on *politically expressive* behaviors and motives. For example, Jones and Hudson (2000) surveyed 557 students at the University of Bath to investigate whether an individual's likelihood of voting was affected by his/her perceived integrity of political parties in the U.K. Kan and Yang (2001) used survey responses in the 1988 American National Election Study to investigate the impact on voting of various emotive feelings (responses) towards the major-party presidential candidates. Although useful in some measure, this research may be missing a more encompassing point: while voting may be expressively-motivated, it is only one of many expressive behaviors that an individual engages in. Thus, it seems possible, if not likely, that important understandings about voting may be found by examining expressive behavior generally rather than focusing narrowly on politically expressive behavior.

To illustrate this point, consider our small-sample finding that the likelihood of voting by at least one person at a residence is nearly twice as high if an American flag is flown there on Memorial Day or Independence Day than if an American flag is not displayed. Narrowly, we

might ask whether this is because the residents are signaling their group affiliation as patriotic Americans by both flying the flag and voting (Nelson and Greene, 2003) or because flying an American flag and voting are behaviors that the individual engages in to BE an American (Schuessler 2000a). However, note also that within the same sample, the incidence of voting by at least one individual at a residence displaying support for AU's football team is over 1.6 times higher than at residences with no such public display of support for AU's football team. Consider also our finding that the likelihood of voting by at least one member of a household displaying multiple expressive behaviors is nearly twice as great as for a household at which one expressive behavior was observed.

There are at least two implications of these findings. First, the decision to vote apparently is motivated by factors which go beyond mere signaling of group identity/affiliation. It is hard to reconcile the added significance of multiple expressive behaviors on the likelihood of voting if voting merely expresses group identity/affiliation. Second, voting may be more completely understood not as politically-expressive behavior but, rather, as a generally expressive tendency that happens on occasion to be manifested in a political context. That is, an understanding of why some people vote and others do not may require an understanding of why some individuals are more expressive (generally speaking) than others. This is a significant departure from the existing discussion about expressive voting which focuses on the individual's sense of civic responsibility or group identification/affiliation. There has been no recognition that different manifestations of expressive behavior may be linked and certainly no discussion of why this might be so and what the implications of such linkages are for our understanding of voting.

However, the suggestion that voting may be but one manifestation of a range of behaviors that are expressively-motivated, rather than instrumentally-motivated, is consistent, at least at first consideration, with the possibility that voting has a genetic foundation (Fowler et al. 2007). Their analysis of the voting behavior of identical versus fraternal twins suggests that 60 percent of the difference in voting turnout is attributable to genetics. It seems plausible to suggest that this genetic feature may actually indicate a tendency to be 'expressive,' with this tendency being exhibited in numerous aspects of life, including voting.

Finally, there may be a quite far-reaching additional implication. Let us suppose, for sake of argument, that there are two distinct 'types' of individuals - - those who are expressive and those who are not. It is not unreasonable to suggest that a tendency to be expressive is reflected in a wide variety of ways, including whether or not the individual is willing to participate in surveys. IF this is true, it is possible that the sizable body of social science research generally, and research focusing on voting specifically, that is based on surveys is biased in a particular manner. That is, survey respondents may be disproportionately drawn from the set of expressive individuals, with individuals who are not expressive disproportionately under-represented in the surveys. This would result from a specific type of selectivity bias that would not have been recognized, much less appreciated, by previous researchers. Going further, a troubling and far-reaching implication would be that the results of this body of survey-based research may not, in fact, be representative of the population as a whole, but, rather, only a biased (i.e., expressive) segment of the population.

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Table 1. Sample Statistics

Variable	Sample	Mean	Standard Error	Min.	Max.
Flew American flag	Small	0.17426	0.37946	0.000	1.000
Auburn Expressiveness	Small	0.08144	0.27422	0.000	1.000
	Large	0.07242	0.25921	0.000	1.000
Political yard sign(s)	Small	0.13795	0.34497	0.000	1.000
	Large	0.11910	0.32395	0.000	1.000
Yard sign(s) – Democrat	Small	0.04224	0.20121	0.000	1.000
	Large	0.04668	0.21098	0.000	1.000
Yard sign(s) – Republican	Small	0.09571	0.29429	0.000	1.000
	Large	0.07242	0.25921	0.000	1.000
Any Expressiveness	Small	0.31947	0.46643	0.000	1.000
	Large	0.18020	0.38438	0.000	1.000
Multiple Expressiveness	Small	0.06997	0.25518	0.000	1.000
	Large	0.01140	0.10597	0.000	1.000
No Expressiveness	Small	0.68053	0.46643	0.000	1.000
	Large	0.81980	0.38438	0.000	1.000
Assessed value of home	Small	268,523.78	110,617.83	60,950	1,116,610
	Large	227,188.32	118,414.83	30,380	1,152,840
Years owned	Small	8.01715	7.95426	0.000	55.000
	Large	10.14282	10.68423	0.000	63.000
Voted on 11/7/2006	Small	0.66667	0.47296	0.000	1.000
	Large	0.64572	0.47835	0.000	1.000

Table 2. Maximum Likelihood Estimation Results – Small Sample

Dependent variable: at least one resident voted in the November 2006 elections

Predictive Variable	Model 1	Model 2	Model 3	Model 4
Intercept	-0.4917*** (0.1727)	-0.4801*** (0.1729)	-0.5120*** (0.1725)	0.2352 (0.2079)
Auburn Expressiveness	0.4851*** (0.2308)	0.4844*** (0.2308)		
Flew American flag	0.6683*** (0.1679)	0.6703*** (0.1679)		
Political yard sign(s)	0.9800*** (0.2055)			
Yard sign(s) – Democrat		0.7058*** (0.3354)		
Yard sign(s) – Republican		1.1154*** (0.2534)		
Any Expressiveness			0.8665*** (0.1313)	
Multiple Expressiveness				0.6472** (0.3151)
No Expressiveness				-0.7466*** (0.1406)
Assessed value of home	1.8660*** (0.5503)	1.8150*** (0.5518)	1.9110*** (0.5491)	1.9180*** (0.5484)
Years owned	0.0598*** (0.0088)	0.0600*** (0.0088)	0.0610*** (0.0087)	0.0606*** (0.0088)
N	1,512	1,512	1,512	1,512
-2 Log Likelihood	1803.940	1802.973	1817.446	1807.446

\*\*\* (\*\*) Chi-squared statistic significant at 0.01 (0.05) level

Table 3. Maximum Likelihood Estimation Results – Large Sample

Dependent variable: at least one resident voted in the November 2006 elections

Predictive Variable	Model 1	Model 2	Model 3	Model 4
Intercept	-0.3371*** (0.0914)	-0.3377*** (0.0917)	-0.3493*** (0.0913)	0.5033*** (0.1316)
Auburn Expressiveness	0.6577*** (0.1473)	0.6579*** (0.1473)		
Political yard sign(s)	0.9627*** (0.1289)			
Yard sign(s) – Democrat		0.9758*** (0.1978)		
Yard sign(s) – Republican		0.9537*** (0.1652)		
Any Expressiveness			0.8818*** (0.1018)	
Multiple Expressiveness				0.6557 (0.4861)
No Expressiveness				-0.8493*** (0.1037)
Assessed value of home	2.1940*** (0.3253)	2.1970*** (0.3272)	2.2340*** (0.3248)	2.2190*** (0.3250)
Years owned	0.0322*** (0.0036)	0.0322*** (0.0036)	0.0325*** (0.0036)	0.0325*** (0.0036)
N	3,963	3,963	3,963	3,963
-2 Log Likelihood	4932.392	4932.385	4936.785	4934.662

\*\*\* Chi-squared statistic significant at 0.01 level

