

Title: What's in a name: the power of fusion politics in a local election.

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I. Introduction

New York State has a long history of strong third parties. The ability of minor parties to survive in the state comes from the practice of cross-endorsements, known as "fusion" politics. State election law allows both multiple nominations and multiple ballot placements. The same candidate can be nominated by more than one political party, and each party receives a line on the election ballot on which to list the candidate. (1) This means that voters can choose a party through which to support candidates, and vote totals for each candidate are combined from among the various party lines. Although cross-endorsement is legal in nine states, New York is the only one in which fusion politics is widely practiced. Many New York voters choose to support candidates in this manner. In a recent governor's race, more than 20 percent of the state's 4.7 million voters cast ballots on third-party lines.

Many students of New York politics believe that minor party endorsements can make the difference in close elections. Scarrow claims that "when a minor party in New York endorses a Republican or a Democratic candidate, post-election arithmetic can reveal how much the party contributed to the joint nominee's vote total." (2) In the 1994 gubernatorial race, the winning candidate received more votes on the Conservative party line than his margin of victory, leading one national reporter to claim that "the add-on party lines can make the difference between victory and defeat." (3) Another national reporter recently noted that, "In a close race, some of New York's third parties can be kingmakers when they support a candidate and serious spoilers when they run their own." (4)

The fact that votes cast on a minor party line were greater than the margin of victory tells us little about its influence on the election. Cross-endorsement means that voters can vote on a minor party line without "wasting their vote" on a candidate unlikely to win. If the minor party had chosen to act as a "spoiler," nominating its own candidate rather than cross-endorsing a major party candidate, would its vote total have been smaller? Counting votes on minor party lines also tells us little about the effects of fusion laws themselves. If New York State banned cross-endorsements, would minor party voters reallocate themselves to the major parties, or would they simply stay home?

To study these questions, we analyze a special election for a seat in the Nassau County legislature on the north shore of Long Island. This election provides an excellent opportunity to examine the influence of New York's minor parties. Since this was a special election, we are able to compare it to the regular election, held just six months earlier, which included similar candidates and issues but different minor party ballot lines. The special election was called when a legislator died

soon after being elected, and the legislator's son ran as the new Democratic nominee. We use the earlier race to hold constant other factors that might have influenced voting patterns. In addition, we were able to obtain detailed data on the campaign waged by the minor party most active in the race, the Working Families Party (WFP). Because control of the county legislature hinged on the outcome of the election and there were several especially salient issues, the race was hotly contested. Turnout in the special election was 28 percent, just below the average turnout in Nassau County Legislative races, which generally hovers at around 30 percent. (5) For this reason, our findings generalize more broadly than would a study of a more typical special election. We find strong evidence that the WFP's efforts led to an increase in turnout and a net gain in votes for the candidate that they endorsed. However, there is little evidence that votes on the other minor party lines represented new votes.

II. The Power of Cross-Endorsements

The cross-endorsement system in New York makes New York elections distinctive in that they in many ways more resemble a multi-party system than the typical American two-party system. Voters are able to "send a message" to the government through votes for third-party candidates without "wasting" their votes on candidates with no chance of victory, and the minor parties are able to influence some control over the Democratic and Republican parties through their perceived ability to deliver these votes.

The Conservative and Liberal Parties are the most well known of New York's minor parties. Of 4.7 million votes cast in statewide elections, the Conservative Party line generally wins about 350,000 votes, the Liberal Party about 100,000 votes. Other important third parties include the Right to life Party, which regularly wins over 50,000 votes, and the Independence Party, which garnered more than 364,000 votes in the 1998 gubernatorial election.

Two new parties were created in 1998: the Green Party and the Working Families Party. The Greens nominated for governor actor and political activist Al Lewis (known as "Grandpa Munster" from the 1960s television show *The Munsters*); he garnered 52,533 votes. The Working Families Party was created "by labor unions and others who felt that neither the state Democratic nor Liberal parties were sufficiently responsive to the needs and concerns of workers and their families." (6) The WFP cross-endorsed Democratic gubernatorial candidate Peter Vallone, and he received 51,325 votes on their ballot line. Exceeding the 50,000 vote mark guaranteed the Green and Working Families parties a line on all New York ballots for the next four years, until the next gubernatorial election. (7)

Many observers believe that New York's minor parties play a significant role in state politics. Their influence is made possible in three major ways: a) acting as a "spoiler" by nominating their own candidate instead of making a cross-

endorsement, b) making or withholding cross-endorsements in order to influence the major parties, and c) giving a line (and possible victory) to a candidate denied a major party line. "While the Conservatives and Liberals rarely have elected candidates on their own, each has used the ability to make or withhold cross-endorsement of major party candidates to influence nominations, general election outcomes, and even public policy decisions." (8)

By choosing to nominate their own candidate instead of cross-endorsing a major party candidate, third parties in New York can act as "spoilers," drawing away enough votes from one of the two major candidates to tip the balance of victory. For example, in 1966 the Liberal Party endorsed Franklin D. Roosevelt, Jr. for governor, instead of cross-endorsing Democrat Frank O'Connor, who went on to lose to incumbent Republican Nelson Rockefeller. Rockefeller's margin of victory, 392,000 votes, was far less than the over half-million votes garnered by Roosevelt. (9) In 1980, incumbent U.S. Senator Jacob Javits was challenged in the Republican primary by an unknown town supervisor from Hempstead, Long Island, Alfonse D'Amato. D'Amato first obtained the Conservative Party endorsement, and then went on to win the Republican primary. Javits was given a line on the general election ballot by the Liberal Party. The resulting three-way contest between Javits, D'Amato, and Democratic Party nominee Elizabeth Holtzman resulted in a victory for D'Amato. He took 45% of the vote, beating out Holtzman's 44% and Javits' 11%. (10)

Minor parties can also influence elections by nominating candidates before the major parties to try to influence their choices, as the Conservative Party did by giving D'Amato his early boost in the 1980 campaign. (11) In 1982, the Liberal Party gave a similar boost to Lieutenant Governor Mario Cuomo, nominating him for governor before the Democratic primary and possibly contributing to his victory over frontrunner Ed Koch. (12)

In rare cases, minor party candidates who are not cross-endorsed major party candidates have gone on to victory, in 1969, incumbent Republican Mayor John Lindsay was defeated in the Republican primary by John Marchi. Lindsay obtained the Liberal Party nomination and won the election, defeating both Marchi and Democratic Party candidate Mario Procaccino. A year later, James Buckley won a seat in the U.S. Senate as a Conservative Party nominee, winning a three-way race against Democrat Richard Ottinger and Republican incumbent Charles Goodell. (13)

For voters, the consequences of the cross-endorsement system can be divided into two major areas. First, voters who prefer the platform of a third party but do not want to waste their vote are able to resolve these conflicting desires by voting for a cross-endorsed third-party candidate who has a good chance of victory. In winner-take-all electoral systems, votes for third party candidates are generally considered wasted because of the slim chance those candidates have of winning. (14) In a cross-endorsement system, supporters of a third party

candidate who is also a major party candidate know that they are voting for a possible winner, and the psychological barrier of "wasting" one's vote is removed. (15) For example, a voter concerned about abortion might choose to vote for the Right to Life Party candidate, knowing that the individual was also endorsed by the Republican Party and had a good chance of winning. The narrow ideological focus of most third parties in the state provides the added benefit of allowing voters to send a message with their vote.

In fact, many minor "parties" which appear on New York ballots are created by candidates in order to send a message to voters. For example, in 1994 Republican candidate George Pataki created the "Tax Cut Now" party (later the Freedom Party), on whose ballot line he received 54,040 votes. Combined with his 2,156,057 votes on the Republican line and 328,605 votes on the Conservative Party line, Pataki was able to defeat Democratic nominee Mario Cuomo, who received 2,272,903 votes on the Democratic line and 92,001 on the Liberal line. "Various 'parties' like this appear and disappear regularly in New York, bearing such names as 'Property Tax Cut,' 'Protect Seniors,' 'Taxpayers,' and 'Save Medicare.'" (16) The advantages to using such temporary parties, despite the state's restrictive ballot access laws, are obvious. These sorts of names are likely to appeal to voters, and to boost a candidate's vote totals.

The use of these temporary "parties" also illustrates the second effect on New York voters of the cross-endorsement system, which is that it allows voters to cross party lines without the stigma or reluctance which might be associated from switching directly between the Republican and Democratic Parties. For example, a voter who has generally supported Democratic candidates but is feeling disillusioned with the party (or dislikes a particular Democratic nominee) might be reluctant to vote Republican, but might be more willing to vote for a "neutral" party such as "Tax Cut Now" or the Working Families Party. Cross-endorsements allow voters to vote for a candidate they like without supporting a party that they dislike. (17)

In addition, minor party endorsements may influence votes on other lines by providing cueing messages to voters. (18) It is well known that many voters use partisan labels as ideological shorthand to assist them in making their vote choices. (19) The additional signals provided by additional ballot lines provide even more cues to voters. This will be particularly important when the cross-endorsements do not conform to traditional expectations--usually, the Liberal Party cross-endorses the Democratic candidate, and the Conservative and Right to Life Parties cross-endorse the Republican candidate. For example, in 1989, when the Liberal Party was so disillusioned with New York Mayor Ed Koch that they agreed to cross-endorse Republican candidate Rudolph Giuliani, this sent a message to voters about what sort of issue positions Giuliani was likely to hold, even if they were unaware that he began to "fudge" his more conservative positions after being courted by the Liberals. (20)

Numerous studies find that giving voters more choices and eliminating the problem of wasted votes (using proportional representation systems) increases turnout significantly. (21) On the other hand, Jackman and Jackman and Miller find that multipartyism (often associated with proportional representation) depresses turnout. (22) However, these findings follow from the fact that multipartyism generally assigns to elections a less decisive role in government formation, which is not the case in a system that allows for cross-endorsements. The increased number of choices for voters made available by the minor parties should increase turnout, as more citizens will feel that there is an option available to them which they would like to support and will have a decisive effect on government formation. The active third parties in New York increase the competitiveness of the party system; "Few could deny that the multiparty system sparks greater interest in the electoral process." (23)

Turnout in New York is hardly distinctive: 47.5% of eligible voters turned out in 1996, and 50.4% in 2000, lower than the national averages of 49.1% and 51.3%. (24) However, as noted by Ward: "New York's registration and voting rates, to a greater extent than the national figures, are depressed by the state's relatively higher proportion of residents who are recent immigrants and unable to vote." (25) Nationally, 10.4% of the population is foreign-born, including 10.6 million naturalized citizens and 17.8 million noncitizens. One of every five New Yorkers is foreign-born, the second highest rate in the country (California, where one in every four residents is foreign-born, is first). Of the approximately 3.9 million foreign-born residents of New York, 40.4% entered the country within the past decade, and 53.9% are noncitizens. (26)

III. "Post-Election Arithmetic"

Candidates believe that additional lines on the ballot (cross-endorsements) provide more votes, and some candidates worry about endorsements a great deal. (27) According to Scarrow, the Liberal and Conservative parties have played a crucial role in a number of New York State election outcomes. (28) In New York, Liberal votes provided John F. Kennedy his margin of victory over Richard Nixon in 1960, and Liberal votes for John Anderson in 1980 were greater than the margin by which Ronald Reagan beat Jimmy Carter. In 1968 and 1970 the Republicans won control of the state Assembly thanks to Conservative cross-endorsements in a number of districts. Stonecash offers a similar list, including Mario Cuomo's victory as governor in 1982 with the help of votes on the Liberal line, Republican Rudolph Giuliani's victory as mayor of New York City in 1993, also with votes on the Liberal line, and Republican George Pataki's victory over Cuomo in 1994 with votes on the Conservative line. (29)

Politicians of the two major parties also believe that the cross-endorsement system influences New York politics. Often, they have criticized the ability of third parties to influence major party nominations as akin to the tail wagging the dog. (30) Leaders of the two major parties have sometimes worked together to

weaken the state's minor parties. (31) Beyond New York, major parties throughout the country have worked since the 1890s to limit fusion politics in order to curb minor party influence. They scored a major victory in 1997 when the Supreme Court in *Timmons v. Twin Cities* upheld the constitutionality of Minnesota's ban on fusion politics. (32)

Schneier and Murtaugh argue that New York's third parties "derive disproportionate influence in no small part from the widespread perception that some third-party cross endorsements are at least superficially decisive in electoral outcomes." (33) In return for those cross-endorsements, regardless of their actual value, the Liberal and Conservative parties have received extensive patronage rewards. (34) Minor parties also use their power to make cross-endorsements to garner support for their policies and ideologies. The Right to Life Party trades its ballot line for promises to aim to curtail liberalized abortion practices. In 1989, the Liberal Party gave early support to U.S Attorney Rudolph Giuliani, who went on to win the Republican nomination for New York mayor (although he lost the general election). "[I]n a concession to his newfound liberal supporters, Giuliani backtracked on some of his conservative positions, including a disavowal of his opposition to abortion." (35) In 1993, state lawmakers killed a measure which would have extended civil rights protections to gays and lesbians after the Conservative Party threatened to withdraw its support from Republican candidates if they voted for the measure. (36)

"Post-election arithmetic" allows speculation about how much cross-endorsements contribute to a joint nominee's vote, and give minor parties their power. Still, it is generally difficult to tell whether the endorsement of a third party has any real effect, since we do not know how voters would have behaved in the absence of the third-party endorsement. We investigate this question, taking advantage of the unique circumstances of the May, 2000, special election to the Nassau County legislature.

IV. The Nassau County Legislative Election

Nassau County is located in the center of Long Island, just east of New York City. Like New York City, Nassau County has strong major party organizations which screen and control candidates for both elected office and patronage, particularly the Republican Party. While the cross-endorsement system encourages candidate-centered elections, the Nassau County GOP committee is historically strong; in 1977 it was reported to raise about \$1 million annually. (37) Nassau County is one of the nation's wealthiest counties, and the 11th Legislative district is the wealthiest district. The median household income in 1990 was \$69,618, over double the national figure of \$30,065, and the median home value of \$369,672 is almost five times the national figure of \$78,500. However, not all of the district's residents are wealthy. Ten percent earn less than \$17,111 a year and a quarter earn less than \$36,283. Similarly, although the percentage with

college degrees or higher is more than twice the national average, about 30 percent of the district's residents have a high school degree or less. (38)

On May 2, 2000, a special election was held in the 11th district of the Nassau County Legislature to replace Barbara Johnson, who had recently died after a long battle with breast cancer. Barbara Johnson had been elected just six months earlier as the candidate of the Democratic and Independence Parties, winning with 66% of the vote. Craig Johnson, her son, was endorsed by the Democratic, Working Families, Independence, and Liberal Parties, and won the race with 58.0% of the vote, including 4.9% of the vote on the WFP line, 3.7% on the Independence Line, and 1.0% on the Liberal line. Republican Party candidate Linda Green received 22.4%, Green Party candidate Ben Zwirn received 19.0% and Right to Life candidate Lorraine Pryhuber received 0.6%. Zwirn's strong share of the vote is explained by his personal following, and is not indicative of strong support for the Green Party. (39)

Although this was a special election for local office, the race was highly publicized and hotly contested, with participation by over 28 percent of the district's 42,621 registered voters. Turnout in Nassau County Legislative races normally hovers at around 30 percent. (40) In 1999, when the county's financial woes led voters to end decades of Republican control, turnout jumped to 34%. Turnout in the special election of May 2000, then, was not unusually small, and in fact was significantly higher than what would normally be expected for a special election. Barbara Johnson's death meant that the party division in the legislature was back to 9-9, and the special election was about not only who should succeed her but also about which political party would be in control. This was of particular interest to voters because of the county's continuing financial difficulties. Although a state bailout had recently prevented bankruptcy, voters knew the new legislature would have to make major cuts in services or raise taxes to balance the budget. (41)

The legislative district is split up into 59 Electoral Districts (EDs), five of which were targeted by the WFP after consultation with the Johnson campaign. Three were described by Johnson campaign officials as "Italian and Polish working class" neighborhoods in the village of Manorhaven, where zoning laws have historically allowed smaller houses than are permitted in much of the rest of the area. The other two were black working class areas in the towns of Roslyn and Port VCashington. (42) These EDs were the focus of a door-to-door canvassing campaign and an election day "get out the vote" (GOTV) effort, the type of person-to-person contact that experimental studies have found to be the most effective use of campaign resources. (43) Voters whom the WFP identified as potential supporters in other parts of the legislative district were called and mailed. In all, the WFP spoke with 4,588 people, according to their campaign database. The WFP spent about \$8,000 for the campaign, providing two full-time equivalent organizers (one full time organizer at about 70 hours a week, and one supervisor at about 15 hours a week, for about five weeks), supervisory and

support (database management) staff, and volunteers. (44) "The Working Families Party during my election [was] very effective, and very vocal," according to Johnson. "A number of people came up to me who are Democrats and said that they voted for me on the Working Families Party line because they got eight calls from the Working Families Party." (45)

The Liberal Party spent about \$800 for mailings, posters, and telephone calls. Before the election, party volunteers made telephone calls and person-to-person visits to the 233 registered Liberal Party members. (46) On election day, Johnson received 120 votes on the Liberal Party line.

The Independence Party spent over \$4,000 to send out 11,000 pieces of mail to individuals registered with the party and to registered voters with no party affiliation, known as "blank registrants." In addition, the party sent out party members in an election day GOTV effort to knock on the doors of Independence Party members and of blank registrants. (47) While there are only 404 registered Independence Party members in the 11th district, 444 voters chose Johnson on the Independence Party line. According to Jim Kapsis, Chairman of the Nassau County Independence Party, this is because the party has the third line on the ballot, immediately after the Republican Party and the Democratic Party, which means that Johnson's name appeared twice in a row. "It has an impact in the voting booth, it's a double whammy." (48)

These claims notwithstanding, extant research finds no evidence that ballot placement has an effect on the vote in a multi-party election with well-known candidates. There is only an effect in races where the candidates are relatively unknown or when party cues are unavailable, as in non-partisan and partisan primary elections. (49) "[P]osition effect will manifest itself in situations where voters have no other guide to a vote choice and must make use of the limited information contained on the ballot itself." (50)

In any event, despite its inferior ballot position, the WFP received more votes than the other minor parties. The Independence and Liberal Parties' lines are further up on the ballot, and the Working Families Party line is at the bottom. While the Independence Party has the third line on the ballot, it only received 444 votes for Johnson, 40 more than the number of party registrants. The WFP, on the other hand, which appears eighth on the ballot, dead last, received 586 votes for Johnson, with only 6 party registrants.

V. Data and Methodology

We examined voting returns in all 59 EDs for the May 2000 special election and the November 1999 general election. We also had access to the WFP campaign database, which records the ED of each voter whom the WFP contacted. The basic regression takes the form

$$(1) [J.sub.i] = a + b[W.sub.i] + c[J.sub.i.sup.-1] + [e.sub.i],$$

where $[J.sub.i]$ is the number of votes for Craig Johnson in ED i in 2000, $[W.sub.i]$ is the number of votes for the WFP, $[J.sub.i.sup.-1]$ is the number of votes for Barbara Johnson in 1999, and $[e.sub.i]$ is an error term with the usual properties. (51) In the regressions below, we also include minor parties other than the WFP in the regression. Here, for the sake of brevity, we discuss only the WFP. The coefficient for the WFP's votes, b , indicates the proportion of the WFP's votes that translated into net votes for Johnson. It is worth noting that there is no a priori requirement that b be between zero and one. The coefficient, b , could be larger than one if the WFP's effort resulted in extra votes for Johnson on the Democratic line. A coefficient of 0.5, for example, would indicate that each 100 WFP votes consisted of 50 new votes and 50 "re-labeled" Democratic votes. This interpretation relies crucially on the availability of a measure of the number of votes Johnson would have received in the absence of the WFP's participation. Fortunately, we have an excellent predictor of this quantity: $[J.sup.-1.sub.i]$, the number of votes Craig Johnson's mother Barbara received when running six months earlier in an election in which the WFP did not endorse a candidate.

We emphasize results with the variables measured in levels, rather than as a fraction of total votes, in order to allow for the possibility that new votes for the minor parties came from those who would not otherwise have voted. That is, the minor parties may have increased turnout. When the variables are measured as a fraction of total votes, a new vote for the candidate can not only increase the numerator (votes for the candidate), but also the denominator (total votes). Increasing the numerator increases the fraction of votes for the candidate, but increasing the denominator decreases it. This makes results when the variables are measured as fractions of the vote much more difficult to interpret, as we discuss further below and in the Appendix.

The main potential concern about equation 1 estimates is that WFP voters could be concentrated in EDs with many likely Democratic voters (perhaps "progressive" EDs), causing the WFP coefficient to be biased by this pre-existing correlation. We control for this by including $[J.sub.i.sup.-1]$, the number of voters for Johnson in the previous year, and conduct a number of specification checks, discussed below. For the WFP, this is not as great a concern as one might think, since the WFP vote does not closely follow the pattern of Democratic votes. The correlation between 1999 Democratic votes and 2000 WFP votes is 0.26. For the other minor parties, the correlation with the Democratic vote is higher, 0.66 and 0.52 for the Independence and Liberal Parties, respectively. For this reason, we expect it to be harder to untangle the effect of the other minor parties from an ED's pre-existing Democratic sympathies than to accomplish the same task for the WFP. (52)

Because past Democratic voting patterns are highly correlated with votes for minor parties other than the WFP, we also run a number of alternative

specifications. If the results are highly sensitive to small changes in specification, then we should be suspicious that they are caused by the failure to untangle the effects of Democratic- and Independence-leaning districts. First, we estimate the regression in differences,

$$(2) [J.sub.i] - [J.sup.-1.sub.i] = a + b[W.sub.i] + e.$$

This is a fairly minor variation on equation 1, simply constraining c to be 1. Hence we should be skeptical of results that are not robust to this change. In addition, this specification provides a direct interpretation of what we mean by "new votes." We attribute new votes to a minor party to the extent that votes in excess of those received in the last election are correlated with those on the minor party line.

In addition, we run WLS regressions with all the variables expressed as fractions of the vote for all candidates, rather than as absolute numbers. These regressions are weighted by the number of voters in each ED, in order to take into account the fact that a one percentage point increase in the vote is worth more in EDs with more total voters. (53) This serves the same purpose of testing for the robustness of our results as the first specification. As mentioned above, this specification is more difficult to interpret than equation 1, and we defer discussion of its interpretation until after the results have been presented.

Another set of results replaces votes for Johnson with total turnout (i.e. the total number of votes). Assuming that the minor party votes represents new votes, rather than displaced Democratic votes, their vote may have come at the expense of other candidates, or by bringing new voters to the polls. Finally, we run regressions using WFP effort (the number of voters contacted in each ED, either at the door or by phone) and an indicator for the tire targeted EDs as substitutes for the WFP votes variables.

VI. WFP's Effect on Net Votes for Johnson

Table 1 shows the results of OLS regressions modeling the special election results. The means of the regression variables are presented in Appendix Table B. Model 1 uses votes for Johnson in 1999 and WFP votes in 2000 to predict Johnson votes in 2000. Not surprisingly, 1999 Johnson votes are an excellent predictor of 2000 Johnson votes, with a statistically significant coefficient estimate of 0.845 ($[R.sup.2] = 0.90$). The statistically significant coefficient estimate for WFP Votes of 1.03 indicates that each 100 WFP votes were associated with an extra 103 votes for Johnson. Model 2 included votes for the other minor parties. In this case, the coefficient estimate for WFP votes falls to 0.646, and the coefficient estimates for the Liberal and Independence Parties votes are surprisingly large (3.78 and 2.21) and statistically significant. On its face this result indicates that the Liberal and Independence Parties turned out votes for Johnson not only on their own lines, but also on the Democratic line.

However, the WFP results are quite robust to alternative specifications, while the other minor party results are less so. Two models were run using as a dependent variable Johnson's vote in 2000 less the Johnson vote in 1999, as in equation 2. This slight change in specification amounts to constraining the coefficient on 1999 Johnson votes to be 1. In Models 3 and 4, the WFP results are fairly similar to the earlier results. With other minor parties in the regression, the WFP coefficient estimate increases to 0.863 from 0.646, which means that each 100 WFP votes are associated with 86 more votes for Johnson than in the earlier election. The coefficients for the other minor parties become statistically insignificant. Liberal and Independence Party votes in 2000 are highly correlated with Johnson votes in 1999 (the correlations are 0.53 and 0.67, respectively), while the WFP votes are not (the correlation is 0.28). Hence it is not surprising that the results for the other minor parties are very sensitive to the treatment of the 1999 Johnson votes, while the WFP results are much less affected by this specification change. (54)

Models 5 and 6 duplicate Models 1 and 2, but use as a dependent variable Johnson's share of the vote as a fraction of total votes, rather than the absolute number of votes. In the simple model (Model 5), WFP votes in 2000 and Johnson votes in 1999 are again strong, statistically significant predictors of the vote for Johnson in 2000. Adding other minor parties (Model 6), the Independence Party coefficient is statistically insignificant, the Liberal Party coefficient is large and marginally significant, while the WFP coefficient is 0.30 and statistically significant.

That the WFP coefficient is smaller in Model 6 than in models 1-4 is an implication of the fact that the WFP increased turnout, rather than persuading Republican (or Green) voters to switch. A new vote, from someone who would not otherwise have voted, does not increase the candidate's fraction of the vote one-for-one. For example, a one percent increase in turnout, all going to Johnson, would increase Johnson's fraction of the vote by only about half a percent. (55) An increase in the numerator of the candidate's share of the vote is partially offset by an increase in the denominator. Hence, if most WFP votes came from those who would not otherwise have voted, the coefficient should be about halved, comparing Model 6 and Model 2, which is what we find. The Appendix demonstrates this relationship via a numerical example. In addition, we also estimated regression models investigating the minor parties' effect on turnout.

Table 2 shows results analogous to Models 1-4 of Table 1, with total voter turnout (i.e. the level of total votes for all candidates) as the dependent variable, rather than the Johnson vote. The WFP's effect on turnout is quite similar to its effect on the Johnson vote, with statistically significant coefficients ranging from 0.64 to 1.40. Each WFP vote is about one more total vote. The Independence and Liberal Party coefficients are larger than the results in Table 1, with statistically significant coefficients of 4.12 and 6.20, respectively, in Model 2. The

Independence and Liberal Party coefficients in Model 4 are not statistically significant. The results in Model 2 imply that Independence and Liberal Party votes are associated not only with more Democratic votes, but also more Republican or Green votes. Results not presented in the table suggest that the association is primarily with Green Party votes. This suggests that the anomalously large effects of these minor parties in Table 1 are not causal effects. Perhaps the Independence and Liberal Parties did well in districts where the voters were angrier with the Republicans who had dominated Nassau politics for decades. It is hard to see why minor party effort should turn out votes for candidates whom they had not endorsed. However, these regressions increase our confidence that the WFP results can be interpreted as causal, since WFP efforts did not seem to help candidates that they had not endorsed.

Table 3 examines the Johnson vote as a function of WFP effort, rather than of WFP votes. WFP effort may be less correlated with unobserved factors driving voting results than are actual WFP votes, and these results are also interesting in their own right. (56) We examine several measures of effort. In five electoral districts targeted by the WFP, extra efforts were made by party workers to contact voters and obtain commitments to vote for Johnson on the WFP line. The WFP attempted to contact every voter in these EDs, while in other EDs only voters deemed likely supporters were contacted. More contacts were made at the door, rather than by telephone, and the five districts were the target of an election day "get out the vote" effort. In these five districts, votes for Craig Johnson consistently exceeded the vote predicted by the 1999 votes for Barbara Johnson, by an average of 43.5 votes (the coefficient on an indicator for the 5 targeted EDs in Model 1). As there were an average of 55.0 votes for the WFP in these electoral districts, this means that each 100 WFP votes in these districts resulted in a net gain of 79 votes for Johnson, and a net re-labeling of 21 votes from Democratic to WFP (this is calculated as $100 * 43.5/55.0$). (57)

Two other sets of results use continuous measures of the WFP's effort in all 59 EDs. The measure of effort in Model 2 is a "contact" with a WFP worker, either over the telephone or in person, as recorded in the WFP campaign data base. The results from Model 2 mean that each 100 WFP contacts resulted in 11.1 net votes for Johnson. Taking into account the total number of contacts and WFP votes, this implies that each 100 WFP votes resulted in 85 net votes for Johnson, which is consistent with the findings in Table 1. (58) The measure of effort in Model 3 is a "Yes" response: a promise from the voter to vote for Johnson on the WFP line. These results mean that each 100 WFP "Yes" responses resulted in 27 votes. This implies that each 100 WFP votes resulted in 73 net Johnson votes, which again is similar to the results in Table 1. (59)

To a certain extent, our methodology is vulnerable to the "ecological fallacy." (60) In other words, we are using aggregate data to talk about individual behavior. However, we cannot use King's solution to the ecological inference problem here because with turnout of about 30% we cannot impose informative bounds.

Bounds depend on what is logically possible, and it is possible that all of the 2000 Democratic voters were non-voters in 1999, and it is also possible that they were all 1999 Democratic voters. (61)

VII. Conclusions

For years, candidates from New York's major political parties have courted cross-endorsements from third parties, particularly from the Conservative and Liberal Parties, because they believed that the extra ballot lines would contribute to their victory. Decades ago, Behn warned that third parties could be decisive in Nassau County and other conservative New York precincts, where "increasing Democratic strength can make the Conservative votes the margin of victory for GOP candidates." (62) The evidence presented here suggests that Behn was right, although the third party in question was the Working Families Party rather than the Conservative Party. Our results show that the Working Families Party votes did represent new votes for the candidate, Craig Johnson, as the WFP induced people to come to the polls who would not otherwise have voted. There is little evidence that the other minor parties were able to turn out new voters, and they may be simply displacing Democratic votes.

That the WFP had a larger effect on the race than the other minor parties is not surprising, since the WFP expended much more effort in the race than the other minor parties. They spent more money, made more telephone calls, canvassed door-to-door for several weeks, and provided a full time organizing staff. Efforts by the Liberal and Independence Parties were much more limited. Less expected was the result that the WFP displaced so few Democratic votes, with each 100 WFP votes representing between 65 and 103 new votes for the candidate.

Why was the WFP so successful at turning out new voters? Theoretically, minor party ballot lines can increase turnout in several ways. Individuals who are dissatisfied with the two major political parties have increased incentive to vote, as they know that their preference for a minor party platform is less likely to be a wasted vote. Individuals who are torn between wanting to support a particular candidate but not the major political party with which that candidate is affiliated--and who are therefore likely to choose to stay home to avoid crossing party lines--can instead support that individual through a cross-endorsement from a third party. In addition, it is likely that the WFP's success is partially a result of its decision to engage in extensive door-to-door canvassing. Previous research has demonstrated that person-to-person GOTV drives can mobilize voters for major political parties much more effectively than can other methods. (63) Our analysis suggests that such efforts can also bring new voters to the polls to support candidates on minor party ballot lines. We conclude that combinations of fusion voting systems and grassroots campaigning by third parties have the potential to alter election outcomes and increase voter turnout.

Appendix: Regressions in Levels versus Regressions in Fractions of Total Votes

This appendix demonstrates, through a numerical example, why regressions of the type described in the body of the paper produce a smaller minor party coefficient when the variables are defined in fractions of total votes than when the variables are measured in levels. Appendix Table A presents hypothetical numbers for two districts, one with a minor party effect and one without.

In the "base district" there are 100 voters, 50% of whom voted for the candidate (i.e. Johnson), all on the Democratic line. In the "alternate district" there were 10 votes on the minor party line (i.e. the WFP), of which 7 were additional votes for Johnson and 3 were displaced Democratic votes. Given this two district data set, a regression of votes for the candidate on votes for the WFP, analogous to model 1 of Table 1 (except lacking the controls for lagged votes) yields a minor party coefficient is 0.7. These numbers were chosen to be in line with the results of Model 2 in Table 1. A similar regression with the variables expressed as fractions of total votes yields a minor party coefficient half the size. The 9.3 percentage points of additional WFP votes result in only 3.3 percentage points of WFP votes, a ratio of 0.35 (which is the same as the regression coefficient). This hypothetical coefficient is almost exactly the same as the WFP result in Model 6 of Table 1. Hence, a coefficient of 0.7 in a regression with the variables measured in levels is consistent with a coefficient of 0.35 with variables measured in fractions.

If the WFP votes had been displaced Republican votes, they would have increased the Johnson vote percentage point for percentage point. However, the 10 minor party votes in Table A consist of 7 votes of additional turnout and three displaced Democratic votes, which are numbers chosen to be consistent with the results in Tables 1 and 2. The additional turnout means that each percentage point of minor party votes will lower the Democrats' share of the vote by increasing the total number of votes in the denominator, even if it has no effect on the number of Democratic votes. Hence when the variables are expressed as a fraction of total votes, the additional share of votes on the minor party line is offset by the reduced share of votes on the Democratic line, causing the coefficient to be smaller than when the variables are measured in levels.

Appendix Table A Hypothetical Vote Distributions

	Base District (no minor party) (1)	Alternate District (with minor party) (2)
Total Votes	100	107
Votes for candidate		
All party lines combined	50 (50%)	57 (53.3%)
Minor party line	0	10 (9.3%)
Minor Party Regression Coefficient: (Difference in votes on all party lines) / (Difference in votes on minor party line)		

	Difference (2) - (1)
Total Votes	
Votes for candidate	
All party lines combined	7 (3.3%)
Minor party line	10 (9.3%)
Minor Party Regression Coefficient: (Difference in votes on all party lines) / (Difference in votes on minor party line)	0.7 (0.35)

Appendix Table B
Means, Standard Deviations, and Sums of Regression Variables

	Fraction of Turnout	District Mean Total # of Votes	Total Across EDs
Election Results, 2000			
Craig Johnson	0.583	119.3	7,041
Democratic	0.494	99.6	5,878
WFP	0.043	10.2	599
Liberal	0.0092	2.03	120
Independence	0.664	7.53	444
Turnout	1.00	205.6	12,128
Votes for Barbara Johnson, 1999	0.664	149.3	8,806
Turnout, 1999	-	227.9	13,444
WFP Effort			
Contacts	0.329	77.8	4,588
"Yes" responses	0.117	27.8	1,638

Note: N = 59 Electoral Districts.

Source: Election Results from Nassau County Board of Elections. WFP Effort from Working Families Party campaign database.

Table 1
Relationship between Johnson Vote and Minor Party Votes:
OLS and WLS Regression Results

	Variables Measured in # of Votes		Dependent Variables Measured in Vote Change	
	Model 1	Model 2	Model 3	Model 4
WFP2000 (s.e.)	1.031 ** -0.182	0.646 ** -0.197	0.855 ** -0.191	0.863 ** -0.235
Liberal 2000 (s.e.)		3.779 * -1.631		0.787 -1.866
Independence 2000 (s.e.)		2.213 ** -0.817		-0.281 -0.813
Johnson 1999 (s.e.)	0.845 ** -0.045	0.702 ** -0.056		

constant	-17.231 *	-16.291	-38.591 **	-38.166 **
(s.e.)	-6.929	-6.326	-3.506	-5.833
R-squared	0.897	0.918	0.260	0.263
Variables Measured as Fraction of Turnout				
	Model 5	Model 6		
WFP2000	0.374 **	0.300 *		
(s.e.)	-0.134	-0.144		
Liberal 2000		2.017 ([dagger])		
(s.e.)		-1.180		
Independence 2000		0.401		
(s.e.)		-0.578		
Johnson 1999	0.997 **	0.973 **		
(s.e.)	-0.053	-0.057		
constant	-0.097 **	-0.112 **		
(s.e.)	-0.036	-0.036		
R-squared	0.872	0.879		

Notes: N=59 for all models. ** = p [less than or equal to] .01, * = p [less than or equal to] 5.05, ([dagger]) = p [less than or equal to] .10. In Models 1 and 2, the dependent variable is the vote for Johnson in 2000. In Models 3 and 4, the dependent variable is Johnson's vote in 2000 less the Democratic vote in 1999. In Models 5 and 6, the dependent variable is Johnson's share of the vote as a fraction of turnout in 2000. Models 5 and 6 are WLS regressions, weighted by 2000 turnout. Other results are OLS.

Table 2
Relationship between Turnout and Minor Party Votes: OLS Regression Results

	Variable Measured in # of Votes		Dependent Variable Measured in Vote Change	
	Model 1	Model 2	Model 3	Model 4
WFP 2000	1.395 **	0.643 *	1.288 **	0.854 *
(s.e.)	-0.304	-0.316	-0.297	
Liberal 2000		6.199 *	2.367	
(s.e.)		-2.649	-2.787	
Independence 2000		4.119 **	1.943	
(s.e.)		-1.206	-1.215	
Turnout 1999	0.918 **	0.745 **		
(s.e.)	-0.057	-0.064		

constant	-17.884	-14.366	-35.385 **	-50.407 **
(s.e.)	-13.441	-11.860	-5.454	
R-squared	0.857	0.895	0.248	0.309

Notes: N = 59 for all models. ** = p [less than or equal to] .01, * = p [less than or equal to] .05, + = p [less than or equal to] .10. The dependent variable is the total number of voters turning out at the polls.

Table 3
Relationship between Johnson Vote and WFP Effort

	Variables Measured in # of Votes		
	Model 1 5 EDs	Model 2 Contacts	Model 3 Yes
Efforts (a) (s.e.)	43.460 ** -10.547	0.111 ** -0.020	0.267 ** -0.051
Johnson 1999 (s.e.)	0.910 ** -0.047	0.873 ** -0.044	0.877 ** -0.044
constant (s.e.)	-20.216 * -7.646	-19.526 ** -6.969	-19.040 * -7.109
R-squared	0.876	0.896	0.892

	Variables Measured as Fraction of Turnout		
	Model 4 5 EDs	Model 5 Contacts	Model 6 Yes
Efforts (a) (s.e.)	0.065 * -0.026	0.035 * -0.015	0.094 ** -0.035
Johnson 1999 (s.e.)	1.018 **	1.006 **	1.004 **
constant (s.e.)	-0.053 -0.099 **	-0.053 -0.098 **	-0.053 -0.096 **
R-squared	0.869	0.868	0.871

Notes: N = 59 for all models. ** = p [less than or equal to] .01, * = p [less than or equal to] .05, + = p [less than or equal to] .10. In Models 1-3, the dependent variable is the vote for Johnson in 2000. In Models 4-6, the dependent variable is Johnson's share of the vote as a fraction of total turnout in 2000. Models 1-3 are OLS. Models 4-6 are WLS regressions, weighted by 2000 turnout.

(a) The measure of effort is an indicator for the 5 targeted electoral districts (models 1 and 4), the number of WFP contacts with voters (models 2 and 5), or the number of "yes" responses from voters promising to vote for the WFP (models 3 and 6).

- (1.) Howard A. Scarrow, *Parties, Elections, and Representation in the State of New York* (New York: New York University Press, 1983).
- (2.) Scarrow, *Parties, Elections, and Representation*, 60.
- (3.) Michael Grunwald, "In New York Politics, Everyone's Invited to the Party," *Washington Post*, 8/10/99, A3.
- (4.) Kit R. Roane, "Strategic, or stupid? Another New York shooting, another political shoutfest," *U.S. News online edition*, 4/3/00, <http://www.usnews.com/usnews/issue/000403/senate.htm>, accessed 2/13/01.
- (5.) Rick Brand, "Gaining the Upper Hand: Changes in elections and the electorate may shake up politics and power on Long Island," *Newsday online edition*, <http://future.newsday.com/5/ftop0509.htm>, accessed 10/17/01.
- (6.) Robert J. Spitzer, "Third Parties in New York," in *Governing New York State*, ed. Jeffrey M. Stonecash, 4th ed. (New York: State University of New York Press, 2001), 63-76, at 66.
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- (8.) Peter W. Colby, "The Politics of New York State Today," in *New York State Today: Politics, Government, Public Policy*, ed. Peter W. Colby (Albany, NY: State University of New York Press, 1985), 9-22, at 19.
- (9.) Spitzer, "Third Parties in New York."
- (10.) Edward Schneier and John Brian Murtaugh, *New York Politics: A Tale of Two States* (Armonk, NY: M.E. Sharpe, 2001) and Spitzer, "Third Parties in New York."
- (11.) Robert J. Spitzer, "The Tail Wagging the Dog: Multi-Party Politics," in *New York State Today*, ed. Colby, 61-69.
- (12.) Spitzer, "Third Parties in New York."
- (13.) Spitzer, "Third Parties in New York."
- (14.) Anthony Downs, *An Economic Theory of Democracy* (New York: Harper, 1957).

- (15.) Scarrow, Parties, Elections and Representation.
- (16.) Schneier and Murtaugh, New York Politics, 66
- (17.) Scarrow, Parties, Elections, and Representation.
- (18.) Grunwald, "In New York Politics, Everyone's Invited to the Party."
- (19.) Angus Campbell, Philip E. Converse, Warren E. Miller and Donald E. Stokes, *The American Voter* (New York: Wiley, 1960).
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- (24.) www.fec.gov
- (25.) Robert B. Ward, *New York State Government: What It Does, How It Works* (Albany, NY: The Rockefeller Institute Press, 2002), 411.
- (26.) Dianne A. Schmidley, U.S. Census Bureau, *Current Population Reports, Series P23-206, "Profile of the Foreign-Born Population of the United States: 2000"* (Washington, DC: U.S. Government Printing Office, 2001); U.S. Bureau of the Census, *Census of Population, 2000* (Washington, D.C.: U.S. Government Printing Office, 2001).
- (27.) Jeffrey M. Stonecash, "Political Parties and Conflict," in *New York Politics and Government: Competition and Compassion*, ed. Sarah F. Liebschutz (Lincoln, NE: University of Nebraska Press, 1998), 63-79.
- (28.) Scarrow, Parties, Elections, and Representation.

(29.) Stonecash, "Political Parties and Conflict."

(30.) Dick Behn, "Liberals and Conservatives: The Importance of New York's Two "Third" Parties," *Empire State Report* 3 (1977): 164-69; Robert J. Spitzer, "The Tail Wagging the Dog: Multi-Party Politics," in *New York State Today*, ed. Colby, 61-69.

(31.) Robert J. Spitzer, *The Right to Life Movement and Third Party Politics* (Westport, CT: Greenwood Press, 1987); Joseph F. Zimmerman, *The Government and Politics of New York State* (New York: New York University Press, 1981).

(32.) Joan Biskupic, "Justices Agree States May Limit Candidates to One Party Line," *Washington Post*, 4/29/97, A7.

(33.) Schneier and Murtaugh, *New York Politics*, 69.

(34.) Schneier and Murtaugh, *New York Politics*; Spitzer, "Third Parties in New York."

(35.) Spitzer, "Third Parties in New York," 73.

(36.) Spitzer, "Third Parties in New York."

(37.) James Gimpel, *National Elections and the Autonomy of American State Party Systems* (Pittsburgh, PA: University of Pittsburgh Press, 1986); Zimmerman, *The Government and Politics of New York State*.

(38.) Calculated by the authors from 1990 Decennial Census Tabulations for the following incorporated villages, unincorporated villages, and Census Designated Places (CDPs) which approximately correspond to LD 11: Port Washington, including Sands Point, Manorhaven, Baxter Estates, and Port Washington North; Roslyn, including Roslyn Heights, East Hills, Roslyn Estates, and Roslyn Harbor; Manhasset, including Munsey Park, Plandome, Plandome Heights, and Plandome Manor; Old Westbury; and Westbury. Although the district includes only parts of Westbury and Old Westbury, census tabulations are only available at the village level. Dropping these villages, which comprise 21% of the population we report, produces similar results. Income quartiles are calculated using linear interpolation from categorical tabulations. The median house value figure for LD 11 is a population-weighted average of medians for the individual villages.

(39.) A Democratic representative on the five-member North Hempstead Town Board from 1989-1993, Zwirn resigned to (unsuccessfully) seek the office of County Executive, and was succeeded by May Newburger. In 1995, Zwirn sought the Democratic Party's nomination to return as North Hempstead

supervisor, but the party nominated Newburger. Zwirn ran an unsuccessful bid as an independent candidate, souring his relationship with the Democratic Party (Brennan, "Zwirn Makes it a Three-Way Race").

(40.) Rick Brand, "Gaining the Upper Hand: Changes in elections and the electorate may shake up politics and power on Long Island," *Newsday* online edition. <http://future.newsday.com/5/ftop0509.htm>, accessed 10/17/01.

(41.) David M. Halbfinger, "The 1999 Elections: Nassau; Nassau County Halts a Century of G.O.P. Rule," *The New York Times*, 11/3/99; Steve Malanga, "New York's Republican Crack-Up," *City Journal*, 11, 2, http://www.city-journal.org/html/11_2_new_yorks_rep.html, accessed 10/17/01; Jackie Pierangelo, "Craig Johnson Wins Big in County Legislator Race," *Port Washington News* online edition, 5/12/00, <http://www.antonnews.com/portwashingtonnews/2000/05/12/news/craig.html>, accessed 2/13/01.

(42.) Joseph Galante. Interview with Joseph Galante, Democratic Deputy Commissioner of Elections and elected North Hempstead Democratic Town Leader, 11/11/00.

(43.) Alan S. Gerber and Donald P. Green, "The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment," *American Political Science Review*, 94 (2000): 653-63.

(44.) William Lipton. Telephone interview with William Lipton, Working Families Party Political Coordinator, 3/21/01; Working Families Party, "Nassau LD 11 Campaign Plan (2000)," unpublished WFP internal memo.

(45.) Craig Johnson. Telephone interview, 11/15/00.

(46.) Jack Olchin. New York State Vice-Chairman of the Liberal Party for Long Island, letter to the authors, 3/29/01.

(47.) Jim Kapsis. Telephone interview, 2/15/01.

(48.) Kapsis, telephone interview.

(49.) Gary Byrne and J. Kristian Pueschel, "But Who Should I Vote for For Coroner?" *Journal of Politics* 36 (1974): 778-84; Fred S. Coombs, John G. Peters and Gerald S. Strom, "Bandwagon, Ballot Position, and Party Effects: An Experiment in Voting Choice," *Experimental Study of Politics* 3 (1974): 31-57; R. Darcy, "Position Effects with Party Column Ballots," *Western Political Quarterly* 39 (1986): 648-62; John E. Mueller, "Voting on the Propositions: Ballot Patterns and Historical Trends in California," *American Political Science Review* 63 (1969): 1197-1212; John E. Mueller, "Choosing Among 133 Candidates," *Public*

Opinion Quarterly 34 (1970): 395-402; W. James Scott, "California Ballot Position Statutes: An Unconstitutional Advantage to Incumbents," Southern California Law Review, 45 (1972): 365-95.

(50.) R. Darcy and Ian McAllister, "Ballot Position Effects," Electoral Studies 9 (1990): 14-15.

(51.) Since the variance of the binomial distribution is $p(1-p)T$, where p is the probability of a vote for the candidate and T is turnout (the number of voters), we would expect the dependent variable to be heteroskedastic, with the variance proportional to turnout. It is less obvious, however, that the error term will be heteroskedastic. In any event, WLS equations which model the variance as proportional to turnout produce results quite similar to the OLS equations we report. We did not estimate GLS models, since we were concerned that the asymptotic properties required for the validity of GLS might not hold in our relatively small sample.

(52.) One possible concern is that W and J are mechanically correlated, since votes for Johnson include votes for the WFP. One way to see that this concern is ungrounded is to consider regressing Democratic votes on WFP votes. Notice that Equation 1 implies

$$(1A) [D.sub.i] = a + (b-1)[W.sub.i] + c[J.sup.-1.sub.i] + e,$$

where $[D.sub.i]$ is votes for Johnson on non-WFP lines. That is, $[D.sub.i]$ would simply be votes for Johnson on the Democratic line, were the WFP the only minor party to endorse him. So equations 1 and 1A are equivalent: if we know that the WFP's effect on votes for Johnson is b from equation 1, we know that the WFP's effect on Democratic votes is $b-1$. Since there is no mechanical correlation in equation (1A), there is also no mechanical correlation in equation (1).

(53.) That is, we model the variance of the error term as inversely proportional to turnout, since the variance of the dependent variable is inversely proportional to turnout by construction.

(54.) Since the dependent variable is differenced, it would also be reasonable to difference Independence Party votes (i.e., use the 1999-2000 change in Independence votes as an explanatory variable rather than the level). In results not reported in the table, differencing Independence votes had little effect on the WFP results, while the other minor party coefficients remain statistically insignificant. The Liberal Party coefficient changes to -0.25 ($t = 0.1$) and the Independence coefficient changes to 1.23 ($t = 1.3$). This issue does not arise with the WFP and Liberal Parties, since they did not endorse any candidate in 1999, and hence the 1999-2000 change in votes is equal to the level of votes in 2000.

(55.) Compare, say, $50/100 = 50\%$ and $51/101 = 50.5\%$.

(56.) In addition, Table 4 is a check for measurement error in the explanatory variables. Measurement error in vote totals will bias the results in earlier rabies towards finding positive effects of minor party votes. Although measurement error is a generic concern with regressions of this type, we do not think that it is an important concern when the variables are vote totals. As expected, the results in Table 4 suggest that measurement error is not a problem.

(57.) These calculations are intended to be in the spirit of instrumental variable (IV) regressions. While less sophisticated, they are perhaps more intuitive, and highlight the substantively interesting reduced form regressions (where the effort variables are substituted for WFP votes rather than being used to predict them). IV results, with the effort variables used as instruments for WFP votes, were quite similar to the OLS results in Table 1.

(58.) This is calculated as $0.111 * 4,588$ WFP contacts equals 509 net Johnson votes out of 599 total WFP votes. $509/599 = 0.850$.

(59.) This is calculated as $0.268 * 1,638$ WFP "Yes" responses equals 439 net Johnson votes out of 599 total WFP votes. $439/599 = 0.733$.

(60.) See, e.g., Gary King, *A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data* (Princeton: Princeton University Press, 1997).

(61.) Turnout is relevant because of the individual level behavior regarding "new voters" we are trying to recover. If we had a microdata panel of voting behavior, we would calculate the percentage of WFP voters that voted Democratic in the last elections, voted for other parties, or did not vote. This would answer a very similar question to the one that we attempt to answer with aggregate data, although it would neglect the WFP's possible influence on voters for other parties.

(62.) Behn, "Liberals and Conservatives," 164.

(63.) Gerber and Green, "The Effects of Canvassing."

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