

An Assessment of Ranked-Choice Voting in the San Francisco 2004 Election

Final Report

MAY 2005

Francis Neely
Assistant Professor of Political Science

Lisel Blash
Senior Researcher, Public Research Institute

Corey Cook
Assistant Professor of Political Science

TABLE of CONTENTS

EXECUTIVE SUMMARY	1
Purpose	1
Methodology	1
Prior Knowledge of Ranked-Choice Voting (RCV)	2
Overall Understanding of RCV	2
Use of the Ranked-Choice Ballot	2
Other Questions	3
Opinion about RCV	3
INTRODUCTION	4
METHODS	5
Study Design	5
The Instrument	6
Surveying Voters	7
Response Rates	8
The Data	8
FINDINGS	11
1. Awareness of RCV Prior to Election Day	11
<i>Age</i>	12
<i>Education</i>	12
<i>Language</i>	13
<i>Race and Ethnicity</i>	14
<i>Income</i>	14
<i>Summary</i>	15
2. Overall Understanding of Ranked-Choice Voting	15
<i>Prior Knowledge</i>	16
<i>Education</i>	17
<i>Income</i>	17
<i>Language</i>	18
<i>Age</i>	19
<i>Race/Ethnicity</i>	19
<i>Opinion of RCV</i>	20
<i>Race/Ethnicity, Controlling for Other Influences</i>	21
<i>Language and Prior Knowledge of RCV</i>	24
<i>Age and Prior Knowledge of RCV</i>	25
<i>General Disposition toward Change and Clarity in This Election</i>	26
<i>Summary</i>	28
3. Use of the Ranked-Choice Ballot	29
<i>Demographics</i>	29
<i>Familiarity with Ranked-Choice Voting</i>	32
<i>Ease of Use</i>	33
<i>Opinions of Ranked-Choice Voting and Attitudes Toward Change</i>	35
<i>Summary</i>	36
4. Further Questions	37
<i>Comparisons across BOS Districts</i>	37
<i>Possible Impacts of RCV</i>	38
<i>Old and New Attitudes about RCV</i>	38

<i>Summary</i>	40
SUMMARY	40
APPENDIX A: Survey Questionnaire	43
APPENDIX B: Demographics	45
APPENDIX C: Frequencies, Basic Precincts Sample.....	50
APPENDIX C: Bivariate Report on Select Variables (Basic Precinct Sample: Q9, Q14, Q15, Q18, Q19, Q20, Q21, Q22, Q23)	61

TABLE of FIGURES

Figure 1. Percent of Voters Who Knew about RCV by Age	12
Figure 2. Percent of Voters Who Knew about RCV by Level of Education	13
Figure 3. Percent of Voters Who Knew about RCV by First Language.....	13
Figure 4. Percent of Voters Who Knew about RCV by Race/Ethnicity	14
Figure 5. Percent of Voters Who Knew about RCV by Income Level.....	15
Figure 6. Percent of Voters that Did Not Understand RCV by Level of Education	17
Figure 7. Percent of Voters that Did Not Understand RCV by Income Level.....	18
Figure 8. Percent of Voters that Did Not Understand RCV by First Language.....	18
Figure 9. Percent of Voters that Did Not Understand RCV by Age.....	19
Figure 10. Percent of Voters that Did Not Understand RCV by Race/Ethnicity	20
Figure 11. Relationship between Opinion of RCV and Reported Understanding	21
Figure 12. Relationship between Race/Ethnicity, Educational Attainment & Level of Understanding RCV	22
Figure 13. Relationship between Race/Ethnicity, Prior Knowledge about RCV, and Level of Understanding.....	23
Figure 14. Relationship between Race/Ethnicity, Voting Incidence, and Level of Understanding RCV...	24
Figure 15. Relationship between First Language, Prior Knowledge about RCV, and Level of Understanding RCV.....	25
Figure 16. Relationship between Age, Voting Incidence, and Level of Understanding RCV.....	26
Figure 17. Understanding of RCV, Controlling for General Dispositions toward Change and Difficulty Deciding on First Choice	27
Figure 18. Relationship Between First Language and Number of Candidates Ranked	30
Figure 19. Relationship Between Race/Ethnicity and Number of Candidates Ranked	31
Figure 20. Relationship Between Race/Ethnicity, Educational Attainment & Number of Candidates Ranked	31
Figure 21. Relationship Between Familiarity with RCV and Number of Candidates Ranked	32
Figure 22. Relationship Between Ease of Ranking Three Candidates and Number of Candidates Ranked	34
Figure 23. Relationship Between Understanding RCV and Number of Candidates Ranked	35
Figure 24. Relationship Between Opinion of RCV and Number of Candidates Ranked	36
Figure 25. Comparing Prior Opinions with Current Opinions on RCV.....	39
Figure 26. Gender (n = 2727)	45
Figure 27. Sexual Orientation (n = 2645)	46
Figure 28. Age (n = 2839).....	46
Figure 29. Education (n = 2814)	47
Figure 30. Annual Household Income (n = 2757)	47
Figure 31. Place of Birth (n = 2824).....	48
Figure 32. First Language (n = 2792)	48
Figure 33. Race and Ethnicity (n = 2816).....	49

TABLE of TABLES

Table 1. Precincts in the Basic Sample (Entries are precinct numbers).....	6
Table 2. Precincts in the Special Neighborhood Samples.....	6
Table 3. Basic Sample Exit Poll and Absentee Surveys Collected.....	8
Table 4. Neighborhood Sample Exit Poll Surveys Collected	9
Table 5. Polling Place Voters' Understanding of RCV	16
Table 6. Absentee Voters' Understanding of RCV.....	16
Table 7. Source of Prior Knowledge about RCV.....	33
Table 8. Comparing Results across Districts	37
Table 9. Before coming to vote today, did you know that you would be asked to rank your choices for the BOS? (Q9)	62
Table 10. What about ranking your top three choices for the Board of Supervisors? Was that... (Q14)..	63
Table 11. When you first filled out your ballot for the Board of Supervisors, did you...(Q15).....	64
Table 12. Overall, how would you describe your experience with Ranked-Choice Voting for the BOS? (Q18).....	65
Table 13. Compared to past elections for the BOS, how much information did you gather about candidates before voting today? (Q19).....	66
Table 14. Compared to past elections for the BOS, were you more or less likely to vote for your most preferred candidate today? (Q20)	67
Table 15. Sometimes voters feel like their vote is wasted, or doesn't count for much in an election. What about you? Compared to past elections for the BOS, which best describes you? (Q21).....	68
Table 16. Thinking just about the campaign for the BOS in your district, was it more or less negative than in past elections? (Q22)	69
Table 17. With the Ranked-Choice Voting system (Instant Runoff), there will be no runoff held in December. Which would you say describes you best? (Q23)	70

EXECUTIVE SUMMARY¹

Purpose

In the November 2004 General Election, the city of San Francisco used a new voting system for electing its Board of Supervisors. This system, Instant Run-off Voting or Ranked-Choice Voting (RCV), was used in seven of the city's eleven districts. The purpose of this study is to evaluate this transition in election systems by gauging the ease or difficulty with which voters expressed their preferences on the new form of ballot. This assessment considers three main indicators:

- Whether voters knew they would be asked to rank candidates before coming to the polls,
- Whether they indicated they understood RCV after having used it, and
- The degree to which they reported using the full function of the ballot by ranking three choices.

Methodology

Two main sets of voters were surveyed for this study: those who cast their ballots in person on Election Day, and those who voted with an absentee ballot submitted through the mail.²

Additional exit poll surveys were collected in several select neighborhoods, over-sampling Asian-Americans, African-Americans, and Latinos (special neighborhoods sample).

- The sample design for the basic sample at the polling places involved a purposive sample of three precincts per district, chosen by how well they represent their districts overall. A total of 2,847 surveys were collected from this sample. Response rates by precinct varied from 22%-53%.
- The sample design for the special neighborhood sample involved a purposive sample of two precincts per district, six precincts in all, chosen for their geographic location and their high concentration of Asian-Americans, African-Americans, and Latinos. Altogether, 543 surveys were collected, with response rates by precinct ranging from 23%-47%
- The sample design for the absentee survey involved a simple random sample of some 1,167 absentee voters. These voters were mailed a comparable version of the survey intended for absentee voters. This mail-out yielded 217 completed surveys for a response rate of approximately 19%.
- The questionnaire was designed to pursue the primary research question of how easy or difficult it was for voters to use the RCV system. It consisted of two sides of an 8 ½ x 14" sheet of paper and approximately 26 questions. It was available in English, Spanish and Chinese.
- A team of 110 student surveyors were deployed to the polling places of the selected precincts on Election Day. Interviewers worked in pairs and surveyed voters in six hour shifts from either 7:00 a.m. to 1:00 p.m. or 2:00 p.m. to 8:00 p.m. Because of known interviewer effects, each pair included one female and one male. Interviewers who spoke Spanish or Cantonese were chosen for precincts with large concentrations of residents

¹ Unless noted otherwise, the figures in the Executive Summary refer to polling place voters.

² We recognize that this excludes a small proportion of voters, such as those who vote early at City Hall.

speaking those languages, and efforts were made to recruit African-American students to survey in primarily African American precincts.

Prior Knowledge of Ranked-Choice Voting (RCV)

- Over two-thirds (69%) of polling place voters and over three-fifths (63%) of absentee voters knew before voting that they would be asked to rank candidates on the Board of Supervisors (BOS) ballot
- About half (51%) of the first-time voters and 41% of “occasional” voters were not aware that they would be asked to rank candidates.
- Those with less prior knowledge of RCV tended to be the least educated, voters whose first language is something other than Chinese or English, and those whose race or ethnicity is something other than Asian or White.

Overall Understanding of RCV

- The wide majority of voters said they understood RCV fairly well or perfectly well (polling place = 86%, absentee = 89%).
- Levels of understanding were lowest among voters with little education and low income.
- African Americans (23%), Latinos (20%), and voters of “Other” racial/ethnic groups (17%) were more likely to report a lack of understanding than were Asian (13%) or White (12%) voters.
- Differences in understanding between African Americans and voters of other races and ethnicities were more pronounced once education, prior knowledge of RCV, and voting habits were considered.
- Prior knowledge significantly lessened the potential for language-based difficulty in using the RCV ballot.
- Asian-Americans living in Chinatown appear to have had more difficulty understanding RCV than did Asians living elsewhere; by contrast, Latinos in the Mission appear to have had less difficulty than Latinos elsewhere.
- Reported levels of understanding of RCV were related to voters’ general dispositions toward change and difficulty making a first choice among BOS candidates.

Use of the Ranked-Choice Ballot

- Most polling place (59%) and absentee (60%) voters reported ranking three candidates; about one-fourth said they voted for only one (23% polling place, 24% absentee).
- The prevalence of ranking three candidates was lowest among African Americans, Latinos, voters with less education, and those whose first language was not English.
- Nearly two-thirds (64%) of those who knew of RCV prior to coming to the polls ranked three candidates versus 47% of those who were unaware of the new development.
- Sixty-three percent of those who understood RCV at least “fairly well” ranked three candidates, while only 36% of those who did not understand it entirely or at all ranked three candidates.

- Voters were most likely to rank three candidates in District 5 (76%) and least likely in District 2 (46%).

Other Questions

- The most common sources of information about RCV were newspapers, the DOE's literature or website, and television.
- Forty-six percent (46%) of polling place respondents felt that they were *more* likely to vote for their most preferred candidate under the new system, 3% felt that they were *less* like to vote for their most preferred candidate, and the majority (51%) said there was no difference. Among absentee voters, 42% said they were more likely to vote for their most preferred candidate, 3% said less likely, and 56% reported no difference.
- Among polling place voters, 29% said they felt less like their vote was wasted, 7% said they felt more like it was wasted, and 64% noted no difference. Among absentee voters, 20% said "less," 7% said "more," and 74% said "no difference."
- Voters were split on whether the BOS campaigns were more or less negative in this election versus past elections (14% said more negative, 15% said less negative).
- Thirty-two percent (32%) of polling place voters said they gather more information for this election compared to past elections, 8% said they gathered less, and 53% said there was no difference. Absentee voters were a bit less likely to report gathering more information (24%), while 5% said they gathered less, and 68% reported no difference.

Opinion about RCV

- A majority of polling place voters (61%) preferred the RCV system; 13% preferred the Runoff system. Opinions were more positive among absentee voters (77% preferred RCV and 11% preferred Runoff).
- About one if five voters (19%) who came to the polls opposing RCV now prefer it to the Runoff system, while 4% of those who supported RCV now prefer the Runoff.
- Among voters who had no clear prior opinions about RCV, 52% now prefer it to the Runoff system, compared to 12% who now prefer the Runoff system.

INTRODUCTION

This report assesses the transition in election systems used for the San Francisco Board of Supervisors (BOS) elections. It examines the seven districts in which an Instant-Runoff system, called Ranked-Choice Voting (RCV) in San Francisco, was used for the first time in the fall, 2004 election. The primary purpose of the study is to gauge the ease or difficulty with which voters expressed their preferences on the new form of ballot. We consider three main indicators: (1) Whether voters knew they would be asked to rank candidates before coming to the polls, (2) Whether they indicated they understood RCV after having used it, and (3) The degree to which they reported using the full function of the ballot by ranking three choices.

We examine these questions by considering groups who might have had more difficulty than others. Those include groups based on language, race and ethnicity, age, education, and income. In addition to the primary question, we take up several additional queries. We explore differences across the seven BOS districts, and test expectations about the potential for changes in the electoral environment with the advent of RCV.

The two principal investigators are Francis Neely and Corey Cook, both assistant professors of political science at San Francisco State University (SFSU). Lisel Blash of the Public Research Institute at SFSU managed the study through all phases, from its inception to this report. Elizabeth Troast of the Public Research Institute served as research assistant on the project and assisted with implementing data collection and data management. John Rogers, Jim Wiley and others at the Public Research Institute at SFSU were integral to the success of the study. In addition, Richard DeLeon, professor of political science at SFSU contributed much, including invaluable advice on design and implementation, and the precinct sample demographic indices. Finally, the study could not have been conducted without the conscientious efforts of student volunteers who collected the exit poll data, and assisted with the mail-in absentee survey and data entry.

This study was funded by the City and County of San Francisco and the College of Behavioral and Social Sciences at San Francisco State University.

METHODS

Study Design

We surveyed voters to pursue the questions outlined above. Our goal was to draw inferences to two main populations of voters: those who come to the polling place on Election Day to fill out and cast their ballot, and those who vote with an absentee ballot submitted through the mail.³ In addition, we collected extra exit poll surveys in several select neighborhoods, oversampling Asian-Americans, African-Americans, and Latinos. Our two main samples, then, are what we call the basic sample of the exit poll, and the mail-in survey of absentee voters. We call the third set of data the special neighborhoods sample and treat it separately, drawing inferences only to those groups in those neighborhoods.

Sample Design

Exit Poll Samples: To produce the most useful data with limited resources, a purposive sample design was used. The basic sample includes three precincts per district, twenty-one precincts in all, chosen for how well they represent their district. The special neighborhood sample includes two precincts per district, six precincts in all, chosen for their geographic location and their high concentration of Asian-Americans, African-Americans, and Latinos.

Basic Exit Poll Sample: Two steps were taken to produce the basic sample. First, we used census data to identify precincts that resemble the overall demographic nature of a BOS district. Ten demographic indicators were used to build an index that captures the nature of the precinct in terms of race and ethnicity, income, home ownership, age, and education. These indicators were standardized and combined to create an aggregate measure of how demographically typical a precinct is in relation to the BOS district. Precincts were sampled that best reflected the overall nature of the district.

The second step of purposive sampling was to consider the ideology of the precincts. This was done to avoid sampling precincts that are ideologically extreme, compared to the rest of the district. We especially wanted to avoid collecting data in a precinct that was unusually approving or disapproving of the RCV reform. To avoid this, we plotted the demographic indicator against an ideological measure of progressivism--Richard DeLeon's Progressive Voting Index. If the most demographically representative precinct was also one of the most ideologically extreme, it was excluded. Otherwise, the precincts were chosen on their demographic typicality.⁴ The following precincts are in the basic sample, ranked by how well they reflect their district's demographics.

³ We recognize that this excludes a small proportion of voters, such as those who vote early at City Hall.

⁴ We coordinated our efforts with others in the area in order to avoid polling at a precinct where another study was polling. We excluded several precincts from the sample in order to accommodate a study organized by the Chinese-Americans for Voter Education Committee (CAVEC). We do not believe this compromised the quality of our sample.

Table 1. Precincts in the Basic Sample (Entries are precinct numbers)

District 1	District 2	District 3	District 5	District 7	District 9	District 11
2111	3217	3324	3513	2725	3921	1101
2103	2212	3322	3548	2724	3931	1105
2144	3218	3341	3526	2742	3919	1118

Special Neighborhood Sample: In contrast to the method just described, we chose several precincts based on how *atypical* they were. This was done to assure an adequate measure of voters’ experiences among Asian-Americans, African-Americans, and Latinos. Precinct-level 2000 census data were used to identify precincts with high concentrations of those groups. The precincts we chose are listed in the table below.

Table 2. Precincts in the Special Neighborhood Samples

Chinatown (District 3)	Western Addition (District 5)	Mission (District 9)
Precinct 3336 92% Asian/Pacific Islander	Precinct 3522 66% African American/Black	Precinct 3918 77% Latino/Hispanic
Precinct 3327 91% Asian/Pacific Islander	Precinct 3515 63% African American/Black	Precinct 3913 69% Latino/Hispanic

Absentee Voters Sample: The sample of absentee voters was generated from the DOE registration files, obtained through their office. We randomly drew 1200 records from a file we created that contained the names and addresses of registered voters in the seven affected BOS districts. Those voters were all registered with the DOE under a permanent absentee voter status. We mailed out 1167 surveys that included pre-addressed and postage-paid return envelopes. Approximately ten days later a follow-up postcard reminder was sent. Due to limited funds, this portion of the study was not as comprehensive as the exit poll portion. Accordingly, our goal here was limited: to allow inferences to be drawn to the entire population of absentee voters in the combined seven districts. We did not anticipate the ability to derive estimates within those districts.

The Instrument

The questionnaire was designed to pursue the primary research question of how easy or difficult it was for voters to vote under the RCV system (See Appendix for English version). In addition, we included measures that would allow us to examine voters’ experience among various groups, especially those based on education, income, language, and race or ethnicity. We also wished to control for factors that might influence one’s tendency to report a positive or negative experience with RCV. Those include one’s general disposition toward change, one’s difficulty with choosing a preferred candidate in this election (aside from the issue of ranking candidates), and one’s opinion about the adoption and implementation RCV in general. Finally, we explored a secondary research question about how RCV may or may not affect the nature of election campaigns and the voting process.

After drafting the questionnaire, we asked for a review from two persons who represented support and opposition for the RCV reform. We asked them to scrutinize our instrument for “any important items we [were] overlooking or possibly misstating.” Neither party noted any problems in the questionnaire.

Questionnaires used in this mode of data collection are typically brief by design. The survey fit on one piece of legal-sized paper, printed on both sides. It was translated into Spanish and Chinese. The absentee version was also available in three languages. We mailed the English version, and included a line in the introduction in Spanish and Chinese that explained how respondents could request a form in their language.

The questionnaire sent to absentee voters varied only minimally from the version used for polling place voters. Most questions were identical, but some required rewording. For instance, the twelfth question in the exit poll read, “Before coming to vote today, what was your opinion of Ranked-Choice Voting (Instant Runoff Voting)?” In the absentee version, the wording was, “Before casting your absentee ballot, what was your opinion of Ranked-Choice Voting (Instant Runoff Voting)?” Also, Questions 17 and 17a that asked polling place voters what happened when their ballot was scanned into the machine were deleted in the absentee version.

Those who took the survey answered nearly all of the questions. An analysis of the item non-response rates for polling place voters assures us that our efforts to keep the form brief paid off. Only a small proportion of respondents stopped midway through taking the survey (i.e., did not fill out the last page). For nine of the twenty-seven questions, 97% to 99% of the respondents gave answers. For five of the questions that everyone was asked to answer, the response rate varied from 92% to 88%. The average item response rate for questions asked of all respondents was 95%.⁵

Surveying Voters

Exit Poll of Polling Place Voters: We recruited 110 volunteer interviewers from political science courses at San Francisco State University. They were trained in two ways. First, each successfully completed the National Institute of Health’s on-line accreditation program for research involving human subjects. Second, each attended a two-hour training session conducted by Professor Neely and Lisel Blash. The students received credit toward various courses for their efforts. This project also provided an extended learning exercise in survey methodology.

Interviewers worked in pairs and surveyed voters in six hour shifts.⁶ Polling places in San Francisco open at 7:00 a.m. and close at 8:00 p.m. Our interviewers worked either a 7:00 a.m. to 1:00 p.m. shift, or a 2:00 p.m. to 8:00 p.m. shift. Because of known interviewer effects, each pair included one female and one male. In addition, in the special neighborhood precincts, we attempted to use interviewers of like ethnic and racial origin. Generally, our interviewers in the Chinatown precincts included at least one Chinese speaking Asian; in the Western Addition, at least one Black; and in the Mission, at least one Spanish speaking Latino.

The exit pollers wore badges that displayed their names and the institution they represented (San Francisco State University). They stood with clipboards and asked voters as they exited the polling place if they would like to take a short survey about Ranked-Choice Voting. Voters who completed the survey did so unassisted, and then folded and placed their forms in a box in order to preserve anonymity. The questionnaires were available to voters in English, Chinese, and Spanish.

⁵ Respondents were asked to skip questions that did not apply to them. Item non-response rates are expectedly higher for those questions, yet still were rather high at 89% to 96%.

⁶ Four of the interviewer teams included a third person.

The interviewers did not sample from the voters leaving the precincts. Instead they asked each person leaving to participate. This worked fairly well since interviewers worked in pairs, and since the rate at which people leave the polling place is more regular than the rate at which they arrive.

Response Rates

Exit Poll: The proportion of voters who completed survey forms was relatively high for this type of survey. Among precincts in the basic sample that were staffed for the full day, that proportion ranges from 22% to 53%.⁷ Response rates in the special neighborhood precincts were similar, ranging from 23% to 47% for those that worked all day. To better understand the potential for bias due to voters self-selecting into the survey, the interviewer kept tallies throughout the day. From those we estimate that 2% of voters who were approached refused to participate because of a language barrier.

Absentee Survey: From the 1167 requests, we collected 217 completed absentee surveys. This leads to a response rate of 19%, although in practical terms it probably slightly higher since we have made no adjustments. For instance, some proportion of the numerator undoubtedly includes outdated records such as people who have moved out of the area or are not eligible to vote for other reasons. The 19% is a low figure, however, it is typical with mail-in surveys that do not include thorough follow-up efforts. Again, that was a function of the resources available.

The Data

In the basic sample, the total number of completed surveys collected across the seven districts was 2847. In the neighborhood sample we collected a total of 546 completed surveys. The total number of completed absentee surveys is 217. The following tables display the number of completes per district.

Table 3. Basic Sample Exit Poll and Absentee Surveys Collected

BOS District	Number of Exit Poll Surveys	Number of Absentee Surveys
D1	405	36
D2	331	42
D3	392	17
D5	529	38
D7	440	38
D9	445	21
D11	305	25
Total	2847	217

⁷ Of the 21 precincts in the basic sample, 16 were staffed for the full day and 5 were staffed for half as long. The response rate reported here is (the number of completed interviews in the precinct) / (total turnout in the precinct minus the number of absentee voters in the precinct). Turnout and absentee figures were obtained from the DOE web pages.

Table 4. Neighborhood Sample Exit Poll Surveys Collected

Neighborhood (District)	Number of surveys
Chinatown (D3)	124
Western Addition (D5)	229
Mission (D9)	193
Total	546

Weighting the Data: The data in the basic exit poll sample are unweighted in the tables above, and weighted in all of the results reported below. The weight variable for the basic exit poll sample is:

$$\text{Weight} = (N/M) / (n_j/m_j)$$

Where

N = total number of completed interviews in all sampled precincts

M = total number of voters voting on Election Day in all sampled precincts

n_j = number of completed interviews in precinct j

m_j = number of voters voting on Election Day in precinct j

The first expression in the weight formula, (N/M) , is simply the overall response rate for the seven districts combined. The second expression, (n_j/m_j) , is the response rate within each precinct. Weighting the data adjusts for discrepancies in the response rates across districts and precincts. For example, if voters tended to respond at higher rates in one precinct than another, then in unweighted data those voters' answers would carry an undue influence on estimates at the district level. If their answers differed from voters in other precincts, then the results would be biased simply by the differing response rates. The function of this weight is to adjust the data to correct that potential for bias. It improves the quality of the data, although in this study the effect is minimal—the results from weighted and unweighted data are very similar. Comparing weighted to unweighted results, we found that the proportions reported in the tables below typically vary by less than 1% and occasionally by as much as 2%.

Data in the absentee mail-in survey sample are not weighted. There were drawn on a random basis from the combined pool of the seven districts of interest. Inferences are drawn back to that population since the number of observations collected does not allow within-district estimates. In addition, observations from the special neighborhood sample are treated as separate data and are not weighted. Those inferences are drawn only to the population of interest in that neighborhood.

Guidelines for Interpreting the Results: In the following pages we have attempted to give an accurate report in an objective manner. We provide the results of tests of statistical significance (Chi-square values and their associated p-values) for the tables and graphs. Readers are encouraged to take caution when interpreting those since they are, in part, a function of the number of observations involved. Substantive differences are sometimes notable and important even when traditional levels of statistical significance (e.g., $p < .05$) are not attained. Conversely, in large samples some substantively negligible differences can reach statistical significance. Recall, also, that the exit poll data are not randomly generated. At base, we draw inferences from these data according to the argument (and census data to support it) that they are

typical and represent the nature of the district. This contrasts to a randomly drawn sample from which we would draw inferences based on assumptions about probabilities.

FINDINGS

The reported findings are organized around three main measures of interest:

1. Did voters know about the Ranked-Choice Voting system before coming to vote?
2. Did they understand it, after having voted?
3. Did voters use the RCV ballot to its fullest potential by ranking three candidates on the Board of Supervisors portion of the ballot?

A fourth section provides comparisons across BOS districts, and examines the impacts of the reform to a Ranked-Choice Voting system.

Wherever possible, we report the findings for both polling place voters and absentee voters. However, when looking at two or more variables we usually have too few cases in the absentee sample to produce good estimates. For that reason, most of the results we report are from the exit poll.

Finally, in the appendices we report the frequencies of responses to all of the questions asked of polling place voters as well as bivariate reports on several key variables.

1. Awareness of RCV Prior to Election Day

Respondents were asked whether they knew that they would be asked to rank their choices for the Board of Supervisors (BOS) prior to voting. Among polling place voters, more than two-thirds (69%) knew that they would be asked to rank their choices for the Board of Supervisors, while almost one-third (31%) were unaware. Absentee voters were slightly less aware, with 63% saying they knew they would be asked to rank BOS candidates, and about 37% saying they did not know.

By a small margin, men were more likely than women to have been aware of RCV (71% vs. 68% among polling place voters and 65% vs. 62% among absentees). Gays/lesbians/bisexuals who voted at polling places were more likely than heterosexuals to have been aware of RCV (81% vs. 68%). We found little difference in this regard among absentee voters of various sexual orientations; however, there were too few cases to produce reliable estimates.

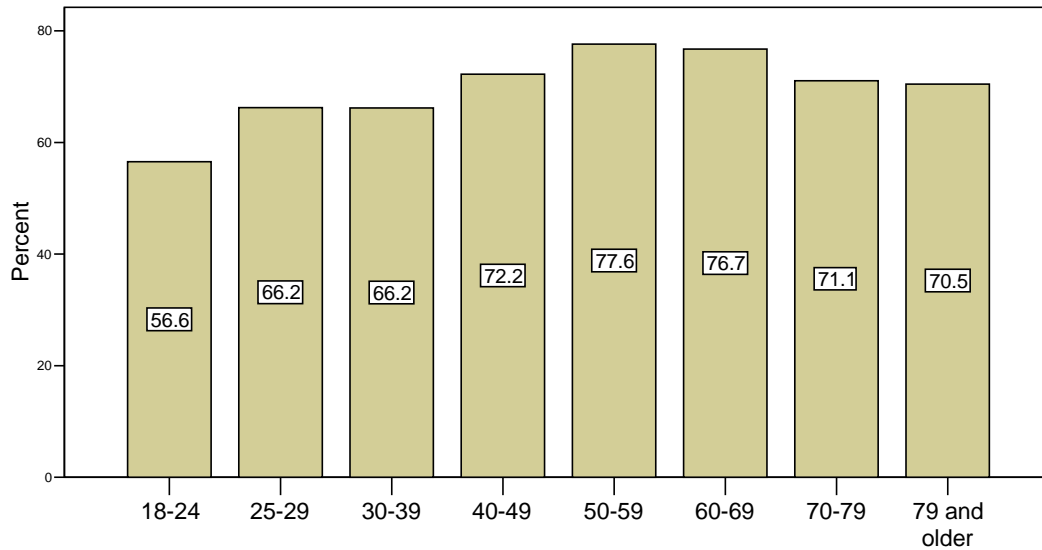
Prior knowledge of RCV was related to one's voting habits. Those who reported that they "always" vote in elections were more aware of RCV. Among polling place voters, first time voters were least likely to have been aware of RCV (49% knew about it). Respondents who said they "occasionally" or "usually" vote were more aware (59% for both groups), and about three-fourths (74%) of those who said they "always" vote knew they would be asked to rank BOS candidates. Due to the small number of observations, absentee voters' responses were collapsed into two categories: those who said they always voted and all others. Over two-thirds (68%) of those who said they always vote also indicated prior knowledge of RCV, while only 39% of all others said they knew they would be asked to rank BOS candidates.

Older voters, more educated voters, higher income voters, those who spoke English as a first language and Whites were all more likely to have known about RCV prior to coming to the polls. Younger voters (especially those under 25), those with Spanish as a first language, African Americans, Latinos, those with a high school degree or less education, and low income voters were less likely to have been aware that they would be asked to rank candidates on the ballot.

Age

Generally, older polling place voters were more likely to have known that they would be asked to rank candidates than were younger voters. This is particularly true of those between the ages of 50 and 69. While a majority of all age groups knew that they would be using Ranked-Choice voting for this election, only 57% of 18-24 year olds knew compared to 78% of 50-59 year olds.

Figure 1. Percent of Voters Who Knew about RCV by Age
(n = 2825; Chi-square = 50.04; p < .001)

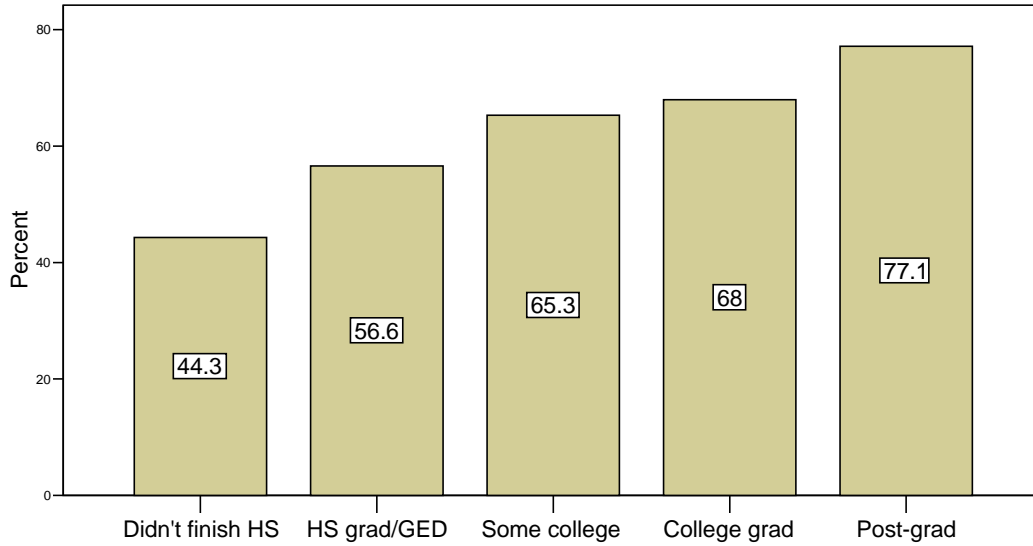


The trend is similar among absentee voters. Age categories were collapsed to provide better estimates: 61% of 18-39 year olds knew about RCV, as did 62% of 40-59 year olds, and 70% of absentee voters 70 years of age or older. (Using those categories among polling place voters leads to 64%, 75%, and 71% with prior knowledge). It is worth noting that our data suggest that absentee voters tend to be older, with 8% of that sample under 30 years old and 26% over 70 years old. Meanwhile, 26% of the polling place respondents were under 30, and only 4% were over 70.

Education

Polling place voters with higher levels of education were more likely to have known about Ranked-Choice voting prior to coming to the polls. About three in five (62%) of those without a college education knew they would be using RCV compared to 72% of those with at least some college education. This pattern persists amongst both frequent voters and first time or infrequent voters. We have too few absentee voters in the lower education categories to make a comparison.

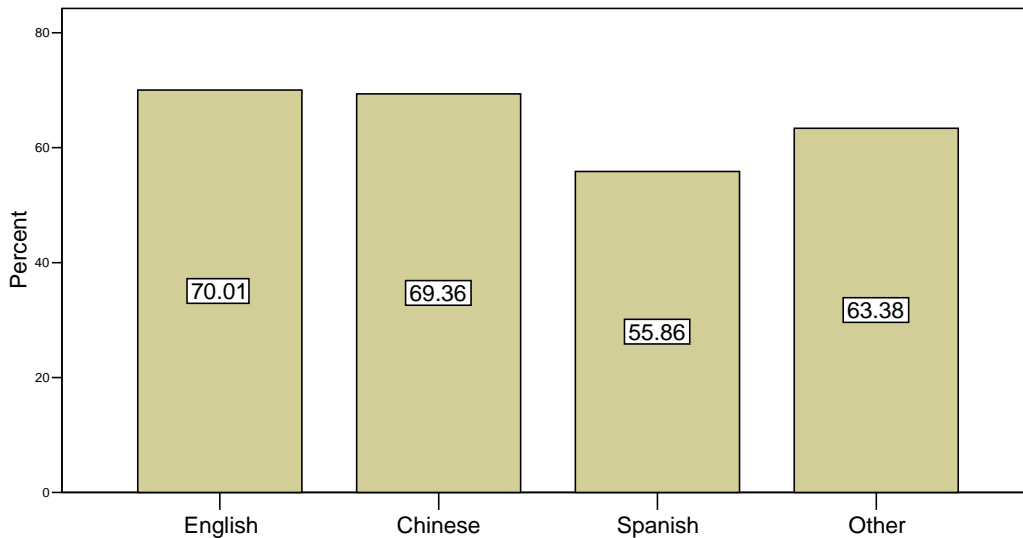
Figure 2. Percent of Voters Who Knew about RCV by Level of Education
(n = 2800; Chi-square = 56.65; p < .001)



Language

Polling place voters who spoke English or Chinese as a first language were more likely to have known ahead of time that they would be using RCV than were those whose first language was Spanish or some other language. This relationship persisted even among those who “usually” or “always” voted. However, among occasional and first time voters, only a little more than half of all language groups knew about RCV prior to coming to the polls. We cannot supply comparable figures among absentee voters because there were too few non-English speakers in that sample.

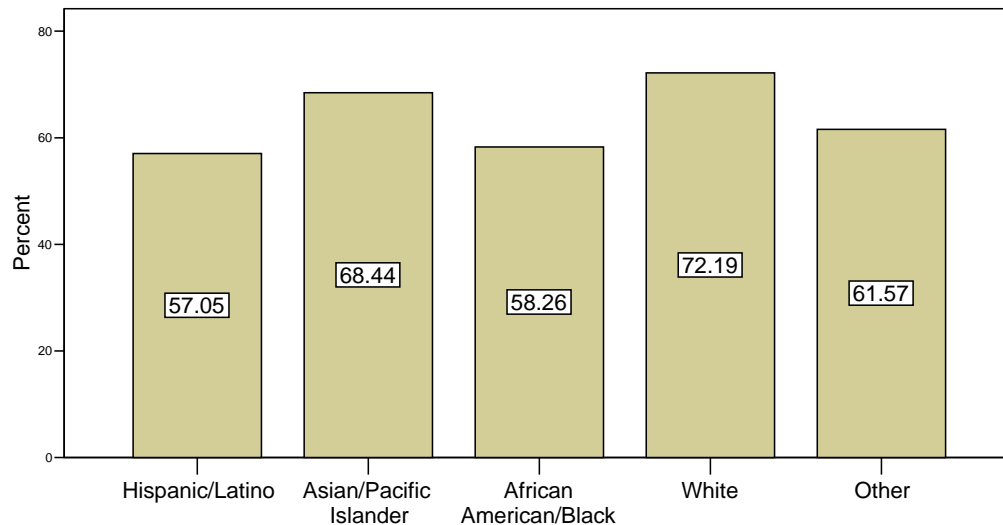
Figure 3. Percent of Voters Who Knew about RCV by First Language
(n=2780; Chi-square = 15.30; p < .01)



Race and Ethnicity

At the polling places, African Americans and Latinos were less likely to have known about Ranked-Choice Voting prior to Election Day. Non-Hispanic whites and Asians were more likely than voters of other races and ethnicities to have known about RCV. This pattern persists among those who “usually” or “always” vote, but is less distinct among occasional or first time voters. The absentee sample includes enough observations to report data only for Asian-Americans and non-Hispanic whites. Both groups showed comparable prior knowledge about RCV (62% of Asians, 64% of whites). On average, they had less prior knowledge than did Asians and Whites who voted at polling places.

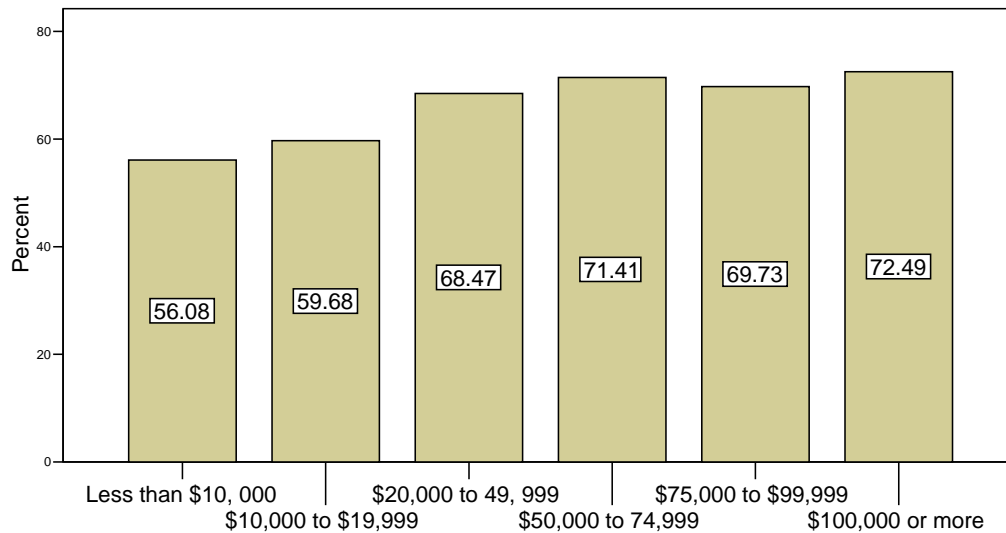
Figure 4. Percent of Voters Who Knew about RCV by Race/Ethnicity
(n=2802; Chi-square = 39.48; p < .001)



Income

Upper income polling place voters were more likely to have known about RCV prior to coming to the polls than were lower income voters. Fifty-six percent of those who reported an annual household income of \$10,000 or less knew they would be asked to rank BOS candidates. Among those with incomes over \$20,000 the proportion who knew about RCV ranged from 68% to 72%. The responses from absentee voters were collapsed into three groups due to fewer cases involved: less than \$50,000, \$50,000 - \$100,000, and over \$100,000 yearly income. The proportion who knew about RCV was 69%, 58%, and 62% respectively. In matching categories among polling place voters, the figures are 65%, 71%, and 73%. In other words, the least wealthy in the polling place sample were the least informed, while the least wealthy voters in the absentee sample were the most informed. Part of the discrepancy could be due to the larger error associated with the smaller absentee sample.

Figure 5. Percent of Voters Who Knew about RCV by Income Level
(n=2747; Chi-square = 26.70; p < .001)



Summary

Most voters in San Francisco knew that they would be asked to rank BOS candidates. That was true of those who cast ballots in polling places (69%) or sent in absentee ballots (63%). However, the proportion who were unaware—about one-third—is not trivial. The factor most related to prior knowledge of RCV was one’s voting habits, with about only half of the first-time polling place voters aware that they would be asked to rank candidates. Other groups who tended to have less prior knowledge of RCV included the least educated, voters whose first language is something other than Chinese or English, and those whose race or ethnicity is something other than Asian or White. Absentee voters resembled polling place voters in several regards, but differed on the question of income. On average, the least wealthy polling place voters were the least aware, while the least wealthy absentee voters were the most aware.

Prior knowledge of the nature of the ballot is only one factor in assessing the ease of transition to RCV. We now turn to a more direct measure—how well voters understood RCV.

2. Overall Understanding of Ranked-Choice Voting

Voters were asked to describe their overall experience with Ranked-Choice Voting on the BOS ballot by reporting how well they understood it. We purposefully asked for an “overall” report of their “experience with Ranked-Choice Voting” in order to focus voters on our question. By using the word “overall” we hoped to avoid reports on specific difficulty people had with, say, the form of the ballot (like the size of the print or layout of the page). By asking about their “experience” we hoped to avoid reports of how well they grasped other aspects of RCV, like the way the votes would be tallied that evening, or the method for transferring a vote from a first preference to a second preference. We sought a measure that would most cleanly gauge the degree to which voters were able to navigate the new system and express their preferences on the ballot.

Reports were positive. Among polling place voters, a little over half (52%) said they understood it “perfectly well.” An additional 35% said they understood it “fairly well.” About one-tenth

(11%) said they “did not understand it entirely,” and another 3% said they “did not understand it at all.” As Figure 6 shows, the proportion of absentee voters who understood RCV is similar.

Table 5. Polling Place Voters’ Understanding of RCV

	Count	Percent
Understood perfectly well	1334	51.6%
Understood fairly well	900	34.8%
Did not understand entirely	280	10.8%
Did not understand at all	69	2.7%

Table 6. Absentee Voters’ Understanding of RCV

	Count	Percent
Understood perfectly well	113	54.3%
Understood fairly well	73	35.1%
Did not understand entirely	17	8.2%
Did not understand at all	5	2.4%

This variable of understanding provides a way of assessing what type of citizens may be more at risk in the transition from a Run-off to the RCV system. In order to consider various factors, and to present the results more clearly as we do, the categories of responses were combined into two classes: first, those who indicated they understood the RCV system either “perfectly well” or “fairly well,” and second, those who indicated they either “did not understand it entirely” or “did not understand it at all.” We treat these two new categories as indicating either understanding or a lack of understanding.

We explored the degree to which one’s prior knowledge, level of education, income, primary language, age, and ethnicity may relate to one’s understanding of RCV. Given the smaller number of respondents in the absentee sample it is not possible to produce reliable estimates for those voters. This section, therefore, reports only on polling place voters.

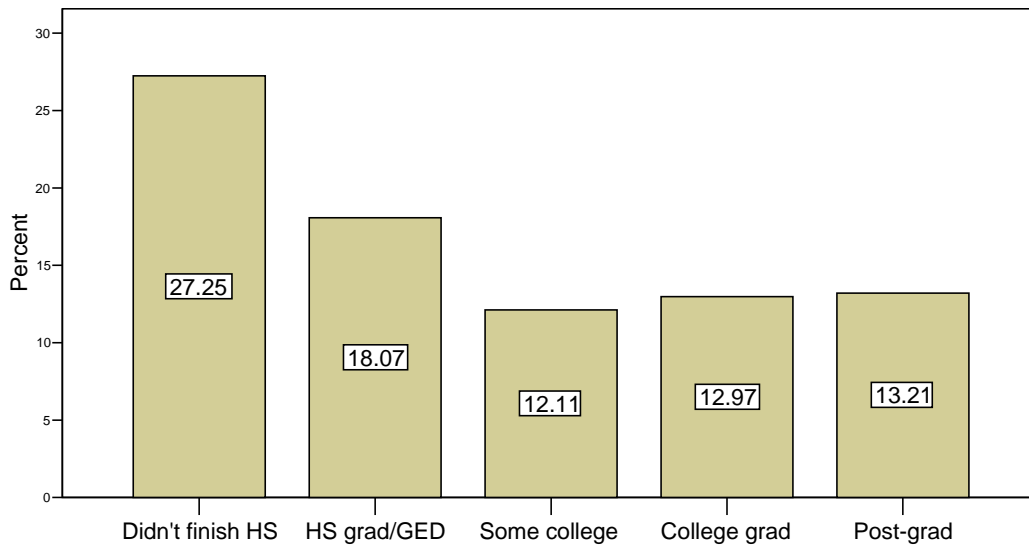
Prior Knowledge

Voters who knew that they were going to be asked to rank candidates were more likely to report understanding the RCV ballot than those who did not have prior knowledge. The difference is fairly large, with only 8% of those who had prior knowledge indicating a lack of understanding, compared to 27% of those who came to the polls unaware that they would be ranking BOS candidates.

Education

The proportion of respondents who reported not understanding the RCV system also varied by how educated they were. Over one-fourth (27%) of the respondents with less than a high school education, and 18% of those with no more than a high school education indicated a lack of understanding. This is in contrast to the balance of the respondents, where about one in eight (12% – 13%) indicated they did not understand RCV.

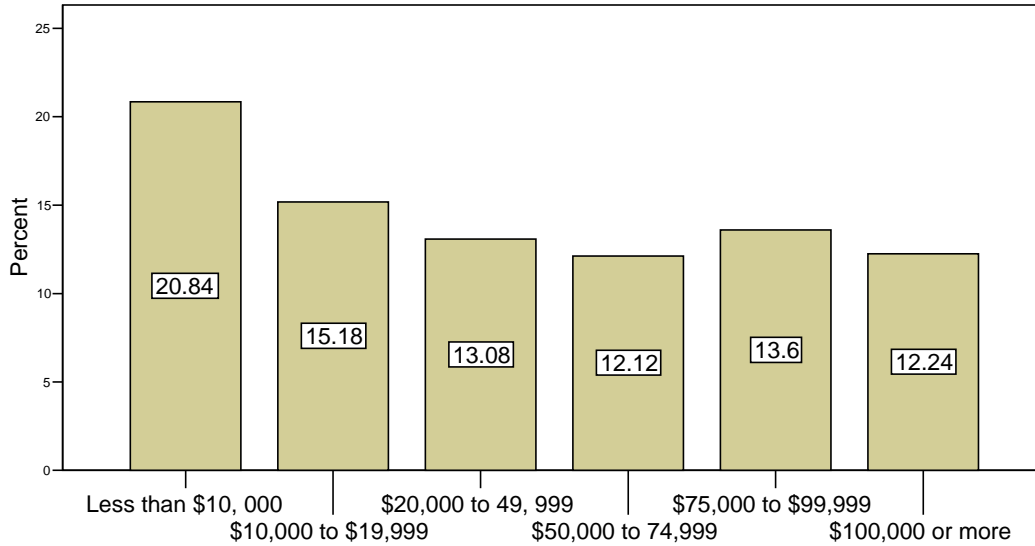
Figure 6. Percent of Voters that Did Not Understand RCV by Level of Education
(n = 2557; Chi-square = 12.37; p < .02)



Income

A higher proportion of respondents with the lowest income reported not understanding the RCV ballot compared to other income groups. Twenty-one percent of the respondents with family incomes below \$10,000 indicated they did not understand RCV, compared to the other income groups where between 12% and 15% gave those responses.

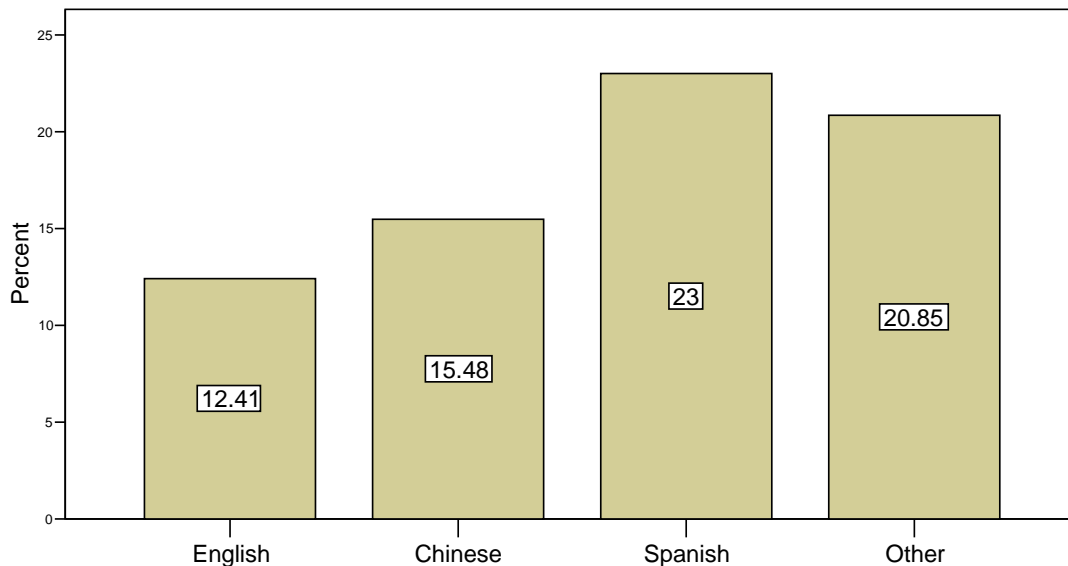
Figure 7. Percent of Voters that Did Not Understand RCV by Income Level
(n = 2507; Chi-square = 9.70; p < .09)



Language

We asked respondents to tell us the first language they learned in order to identify voters who might have had more difficulty navigating the ballot. Differences were observed. Among English speakers, 12% expressed a lack of understanding, a lower proportion than among Chinese speakers (15%), Spanish speakers (23%) and those who reported some other primary language (21%).

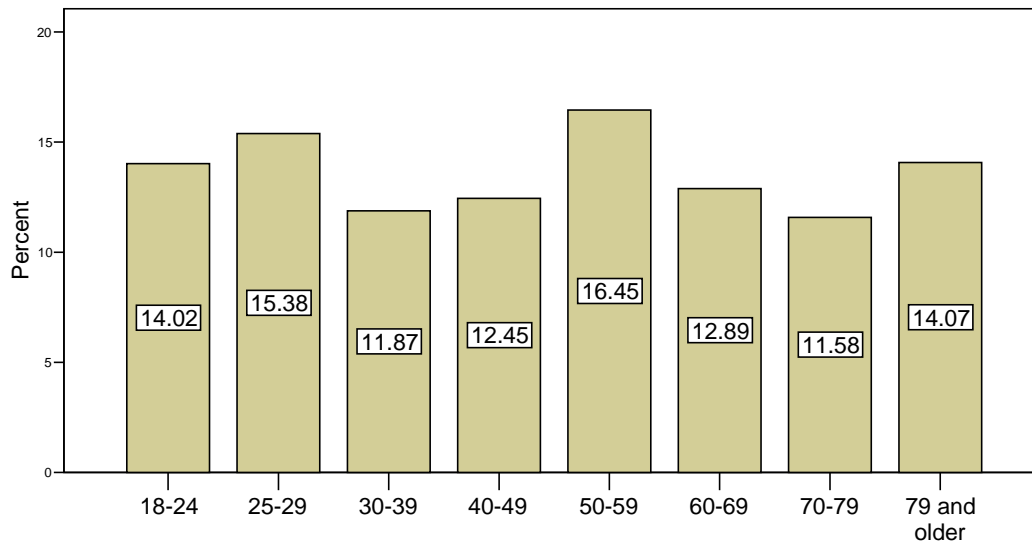
Figure 8. Percent of Voters that Did Not Understand RCV by First Language
(n = 2537; Chi-square = 19.87; p < .001)



Age

Our expectations about age were unclear. It could be that elderly voters would be at risk, but it could also be that the youngest group that contains new voters would encounter problems. As it happens, there were differences, but no clear patterns, at least in the simple bivariate analysis (however, see the section on age and prior knowledge below). The proportion of respondents indicating they did not understand RCV ranged from 12% to 16% across age groups.

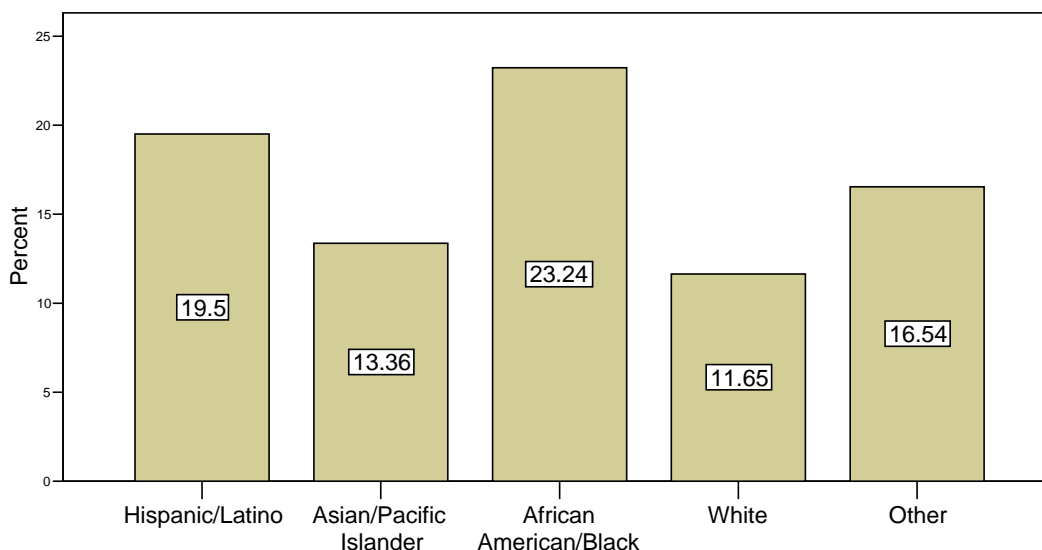
Figure 9. Percent of Voters that Did Not Understand RCV by Age
(n = 2577; Chi-square = 6.65; p < .47)



Race/Ethnicity

Finally, we expected there might be differences across ethnic groups since other factors mentioned above, like language and levels of education, differ across such groups. Respondents self-identified in responses to the question, “What is your race or ethnicity?” The proportion of voters indicating they did not understand the RCV system was highest among African Americans (23%) and Latinos (20%). It was lowest among Whites (12%) and Asian Americans (13%), with 17% of voters of other ethnicities reporting a lack of understanding.

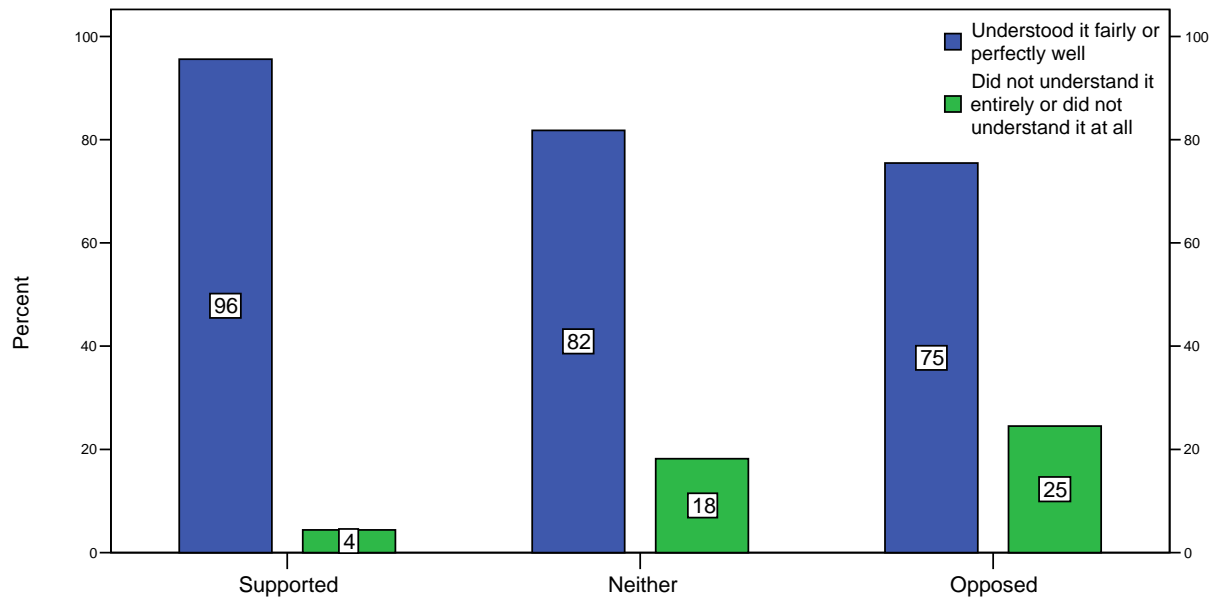
Figure 10. Percent of Voters that Did Not Understand RCV by Race/Ethnicity
(n = 2555; Chi-square = 24.76; p < .001)



Opinion of RCV

Another thing that might explain a voter's reported understanding of RCV is their attitude about the reform and its implementation. Some voters who were opposed to the change may have genuinely not understood the ballot. Others may have reported a lack of understanding based on a bias against the general idea of RCV and reluctance to using it. Conversely, supporters of the reform may have been more likely to say they understood the ballot based on a bias for the new system. We asked voters the following question: "Before coming to vote today, what was your opinion of Ranked-Choice Voting (Instant Runoff Voting)?" The figure below displays a relationship between one's prior opinion of RCV and one's reported understanding of the ballot. It is worth noting that among voters who said they neither support nor opposed it, 18% indicated a lack of understanding, and the other 82% said they understood it fairly well or perfectly well.

Figure 11. Relationship between Opinion of RCV and Reported Understanding
(n = 2526; Chi-square = 118.28; p < .001)

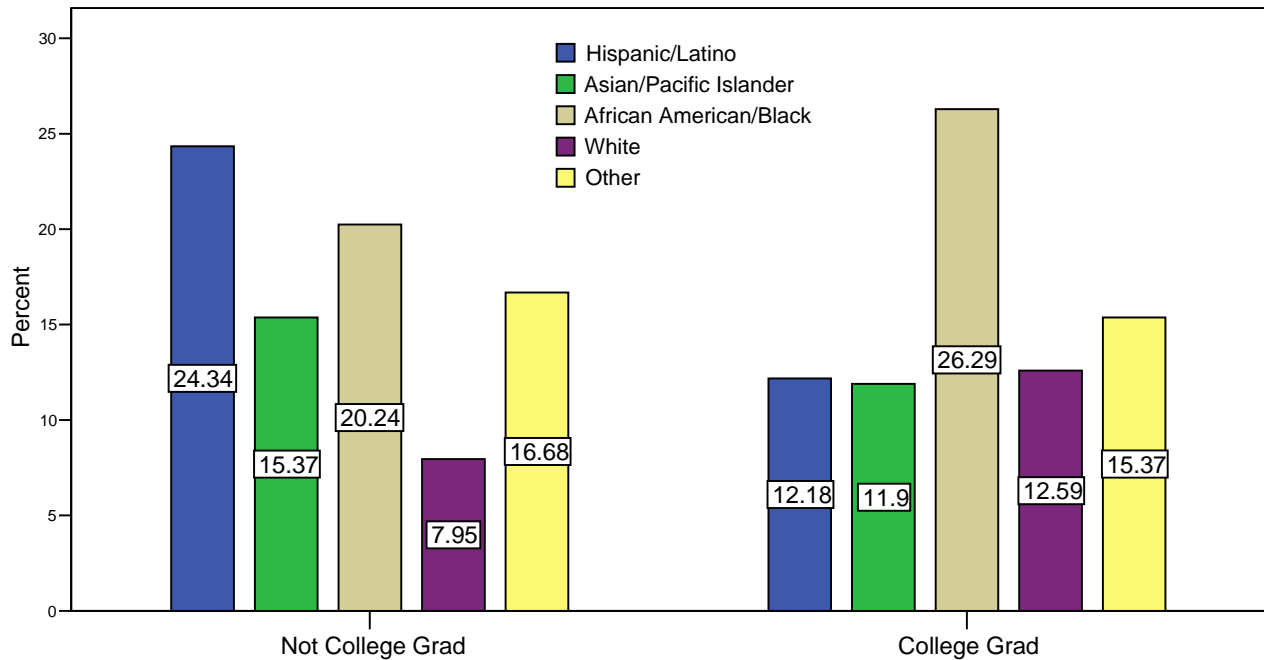


It is useful to look beyond bivariate reports in order to better understand what might explain a lack of understanding. In the following section we consider three factors together, focusing on differences in understanding among racial/ethnic groups, language groups, and age groups.

Race/Ethnicity, Controlling for Other Influences

Once we control for levels of education the difference between voters' understanding across racial and ethnic groups changes. Among voters who have not graduated from college, about one-fourth (24%) of Latinos report not understanding RCV, as do 20% of African Americans, 17% of "Other" ethnicities, 15% of Asians, and 8% of whites. Among less educated voters, therefore, we see substantial differences in levels of understanding across the five groups. By contrast, among voters with a college degree, the key difference is between African Americans (26%) and all other groups (ranging from 12% to 15%).

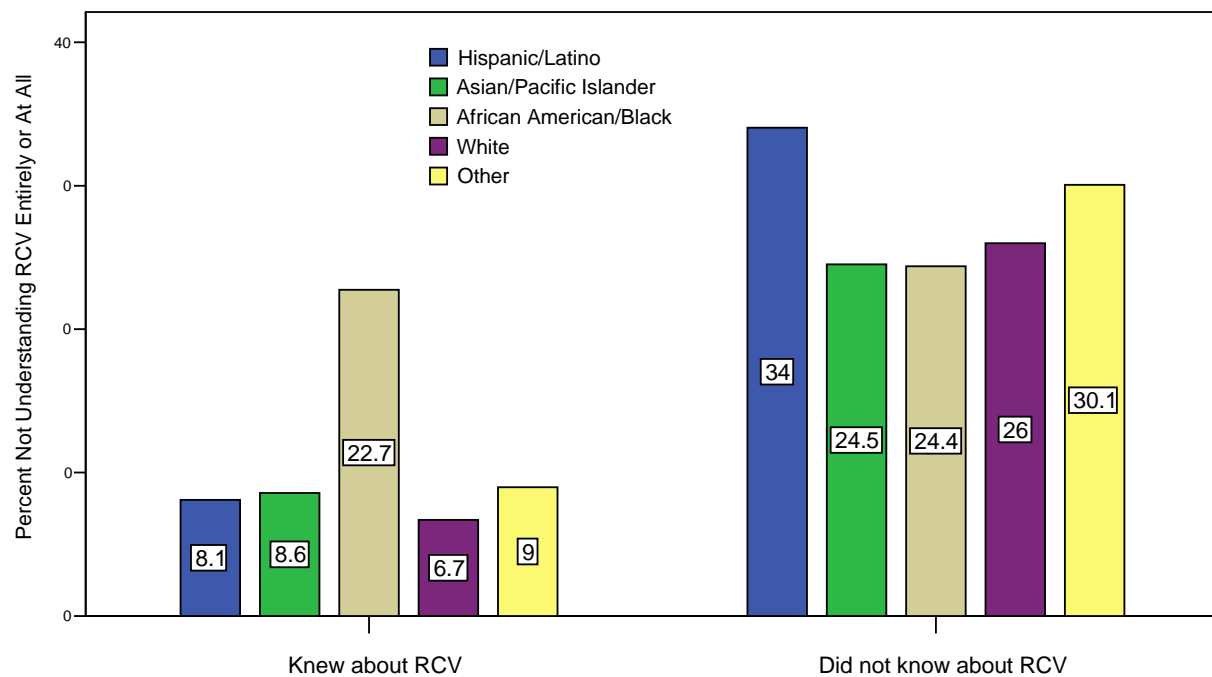
Figure 12. Relationship between Race/Ethnicity, Educational Attainment & Level of Understanding RCV (n = 2531)



Within racial group comparisons across education levels: Chi-square Latino = 5.35, $p < .03$; Chi-square Asian = .91, $p < .35$; Chi-square Black = .57, $p < .46$; Chi-square White = 5.75, $p < .02$; Chi-square Other = .039, $p < .85$
 Within education group comparison across race/ethnicities: Chi-square Not College Grad = 26.27, $p < .001$; Chi-square College Grad = 8.95, $p < .07$

What about prior knowledge of the Ranked-Choice Voting system before coming to vote? Comparing the left panel to the right panel in the figure below, we see the general trend noted above: voters who knew they would be asked to rank BOS candidates tended to say they understood it much more frequently than those who did not have prior knowledge. The exception is African American voters. About the same proportion of Blacks who knew about RCV as those who did not indicated a lack of understanding (23% vs. 24% respectively). By contrast, there is a large difference in understanding among Latinos, depending on whether they knew about RCV beforehand. Among those who did know, a mere 8% said they did not understand it, compared to 34% of the Latinos with no prior knowledge who indicated a lack of understanding.

Figure 13. Relationship between Race/Ethnicity, Prior Knowledge about RCV, and Level of Understanding
(n = 2548 Chi-square = 12.37; p < .02)

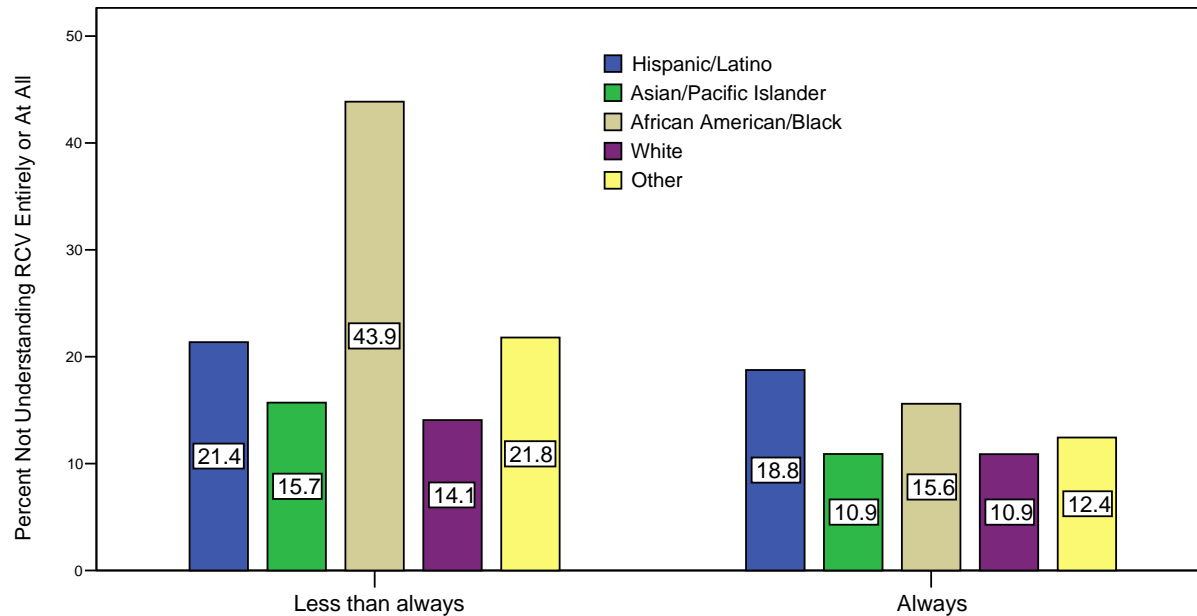


Within racial group comparisons across prior knowledge conditions: Chi-square Latino = 72.23, p < .001; Chi-square Asian = 16.20, p < .001; Chi-square Black = .03, p < .88; Chi-square White = 115.95, p < .001; Chi-square Other = 11.79, p < .001

Within prior knowledge condition comparisons across race/ethnicities: Chi-square Knew about RCV = 26.88, p < .001; Chi-square Did Not Know about RCV = 3.90, p < .43

Now let us turn to the question of voting habits. In order to produce more reliable estimates, responses to a question about how often people vote were collapsed into two groups: those who said they “always” vote, and all others (those either voting for the first time, those who “occasionally” vote, or “usually” vote). Those who said always vote tended to understand RCV better than others (12% indicated a lack of understanding versus 17%). We see a consistent pattern within race and ethnic groups. The difference is greatest, however, among African Americans: among Blacks who always vote, the proportion who indicated they did not understand RCV (16%) is much lower than among those who vote less frequently (44%). These results should be treated with some caution due to the small number of observations in some categories.

Figure 14. Relationship between Race/Ethnicity, Voting Incidence, and Level of Understanding RCV
(n = 2550)

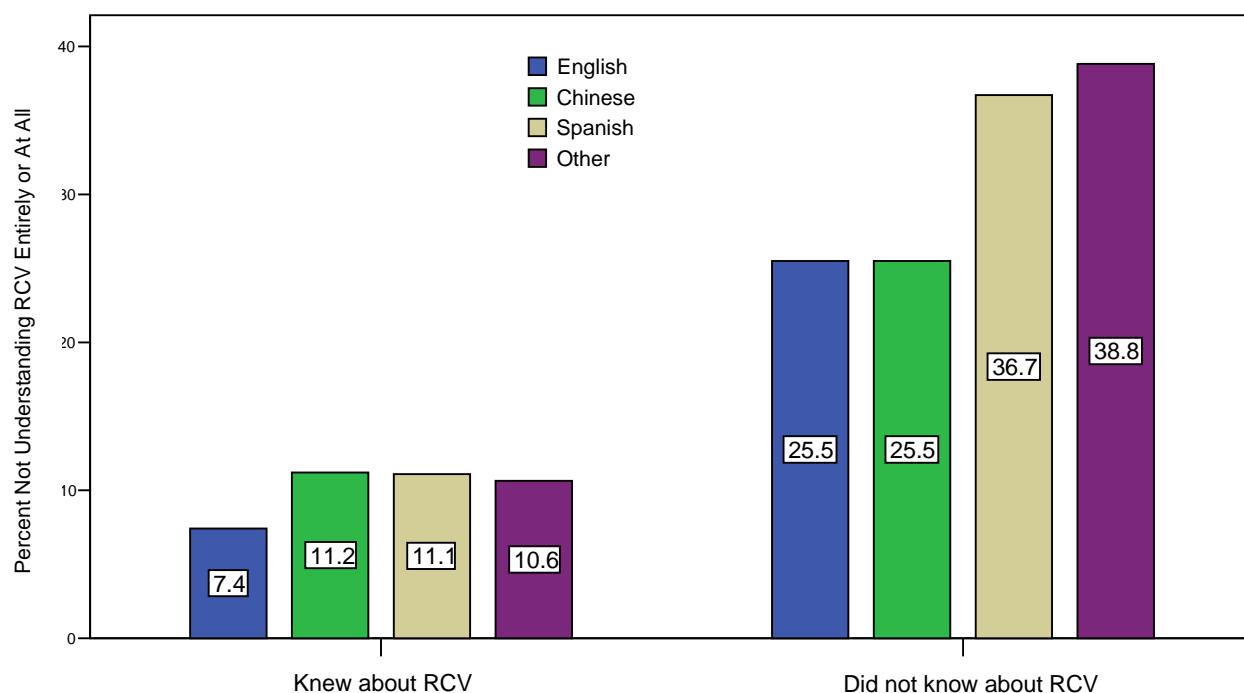


Within racial group comparisons across voting habits: Chi-square Latino = .22, $p < .65$; Chi-square Asian = 1.72, $p < .20$; Chi-square Black = 10.56, $p < .001$; Chi-square White = 3.00, $p < .09$; Chi-square Other = 2.29, $p < .14$
 Within voting habit group comparisons across race/ethnicities: Chi-square Less than Always = 20.82, $p < .001$; Chi-square Always = 11.10, $p < .03$

Language and Prior Knowledge of RCV

The differences in understanding among different language groups noted above also change once we control for one's prior knowledge of RCV. Among those who knew they would be ranking candidates, levels of understanding were fairly similar across language groups. Voters who learned English as their first language indicated slightly better understanding of RCV than others (7% of English speakers did not understand it, compared to 11% for others). Among voters who did not know they would be asked to rank candidates, the lack of understanding was considerably more prevalent, and varied more across groups. Over one-third (37%) of such Spanish speaking voters and 39% of those using some other language indicated they did not understand RCV. Those levels are considerably higher than was found among voters for whom English (26%) or Chinese (26%) is their first language. Overall, prior knowledge appears to have lessened the potential for language-based difficulty in using that part of the ballot. Two words of caution are in order. First, since our survey was translated from English into Chinese and Spanish but not into other languages, our estimate in the "other" category may be off. Second, due to the low number of observations in some categories, these results should be taken guardedly.

Figure 15. Relationship between First Language, Prior Knowledge about RCV, and Level of Understanding RCV
(n = 2529)

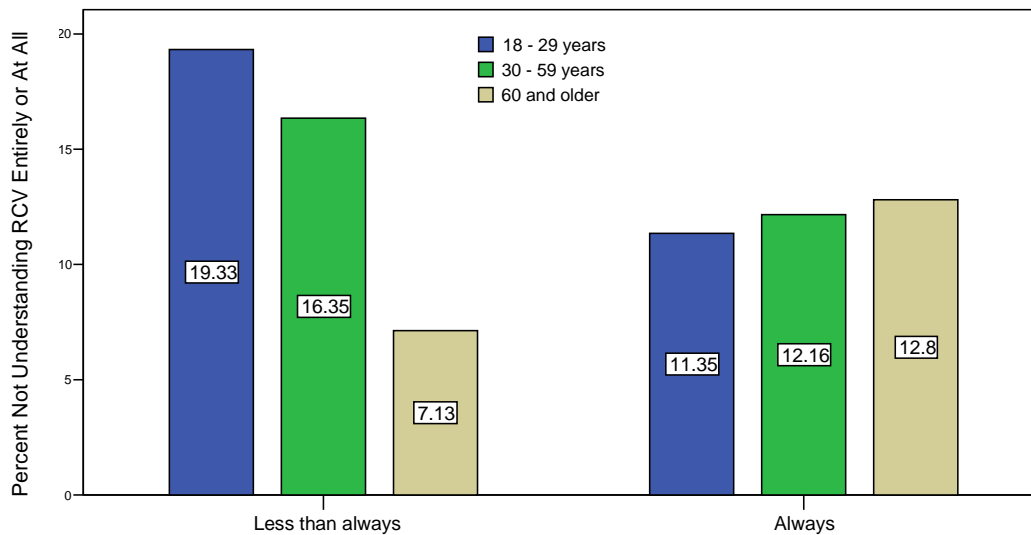


Within language group comparisons across prior knowledge conditions: Chi-square English = 129.17, $p < .001$; Chi-square Chinese = 3.04, $p < .09$; Chi-square Spanish = 13.25, $p < .001$; Chi-square Other = 18.02, $p < .001$
 Within prior knowledge condition comparisons across language groups: Chi-square Knew about RCV = 3.68, $p < .30$; Chi-square Did Not Know about RCV = 7.99, $p < .05$

Age and Prior Knowledge of RCV

The bivariate analysis of understanding across age groups reported above showed no systematic differences. However, if we control for voting habits, then we observe some meaningful variation. Among citizens who report always voting, the proportion who said they did not understand RCV is similar across age groups (ranging from 11% to 13%). Among citizens who do not always vote, the differences reflect less understanding among younger voters. Seven percent of those over 60 indicated a lack of understanding, compared to 16% among the 30-59 year-olds, and 19% among voters 18-29 years of age. Again, these are results that should be taken with caution since the number of respondents in some categories is rather low.

Figure 16. Relationship between Age, Voting Incidence, and Level of Understanding RCV
(n = 2571)



Within age group comparisons across voting habits: Chi-square 18-29 Yrs = 8.17, $p < .01$; Chi-square 30-59 Yrs = 4.44, $p < .04$; Chi-square 60 Yrs plus = 1.22, $p < .28$

Within voting habit group comparisons across age groups: Chi-square Less than Always = 4.54, $p < .11$; Chi-square Always = .26, $p < .89$

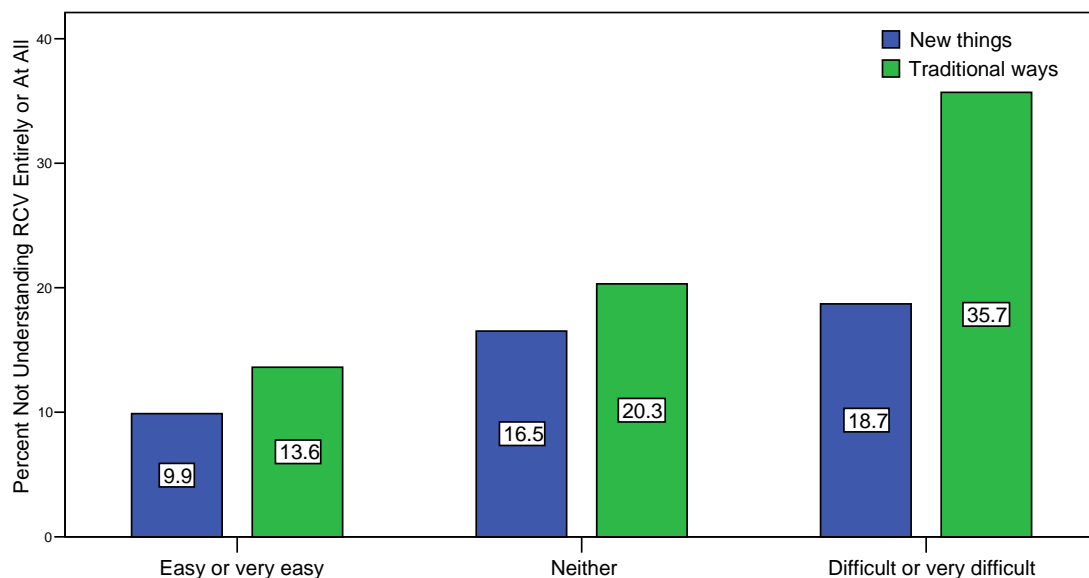
General Disposition toward Change and Clarity in This Election

To understand one's overall reported experience of voting under the RCV system, it helps to control for more general attitudes. A reluctance to accept change in the most general sense will probably make a voter more likely to give negative reports when asked about this specific change. We asked respondents whether they thought it was better to "try new things" or to "stay with the traditional ways of doing things." Among those who indicated a preference for change, 13% said they did not understand RCV entirely or at all, compared to 18% among voters who indicated a preference for tradition. It is possible, then, that some of the reported lack of understanding is inevitable due to some voters' preference for keeping things the way they are.

Another factor we wanted to control for was one's difficulty with the voting decision for the BOS in general. We asked voters how easy or difficult it was for them to decide who their first choice was. Difficulty in finding one's first-choice candidate should not make a difference one way or the other in how easy a voter found the RCV process. But because we suspected some voters may conflate those two things, we asked. We found that our suspicions were well based. One in ten (10%) of respondents who said it was easy or very easy to decide on their first choice also indicated they did not understand RCV. By contrast, 21% of those who said it was difficult or very difficult to find a first choice reported not understanding RCV. Therefore, it is possible that a portion of the reported lack of understanding of RCV was a function of difficulty voters had deciding on a first choice in the BOS races.

We report these two variables together in the following figure. The lack of understanding was highest (36%) among voters who had difficulty identifying a favorite BOS candidate and who prefer tradition over change. It was lowest (10%) among those who found it easy to identify a favorite BOS candidate and who prefer change over tradition.

**Figure 17. Understanding of RCV, Controlling for General Dispositions toward Change and Difficulty Deciding on First Choice
(n = 2368)**



Within Traditional/New Things categories, comparing across ease/difficulty of finding first choice: Chi-square New Things = 26.11, $p < .001$; Chi-square Traditional Ways = 9.72, $p < .01$

Within ease/difficulty of finding first choice groups, comparing across Traditional/New Things categories: Chi-square Easy or Very Easy = 2.29, $p < .13$; Chi-square Neither = .81, $p < .37$; Chi-square Difficult or Very Difficult = 6.04, $p < .02$

Special Neighborhood Samples

In order to examine the differences across important ethnic groups in San Francisco, we gathered additional surveys in three neighborhoods that contain large proportions of Chinese, Latino and African American voters (Chinatown, Mission/Excelsior, and Western Addition). According to 2000 census data, the two Chinatown precincts we surveyed contained 91% and 92% Asian/Pacific Islanders. Among the surveys we collected there, 68% of the respondents self identified that way. In the two Mission precincts, the census showed 69% and 77% Hispanic/Latino residents, while 27% of the respondents we surveyed there said they were Hispanic/Latino. And in the Western Addition precincts, the census data showed 63% and 66% African-American/Black. Among those who completed surveys in those precincts, 70% identified themselves that way.

Clearly, our efforts to collect data among members of these specific groups were more successful in Chinatown and Western Addition than in the Mission. However, the 27% of Latinos in the Mission sample is much higher than the 10% in the basic sample, and will still provide some useful information. We will report on each neighborhood sample in turn. It is important to note that these data generalize only to the specific group and only in that neighborhood.

Western Addition: First, let us return to the question of how many people knew about RCV before voting. Among Blacks surveyed in the Western Addition precincts, 54% said they knew they would be asked to rank BOS candidates, compared to 58% among African-Americans in the basic sample. As to how well they understood the RCV ballot, 20% of African-Americans indicated a lack of understanding in the Western Addition, versus 23% in the basic sample.

While the number of cases becomes too small for good estimates, we find little difference in the proportion of Blacks in the Western Addition and the proportion of Blacks in the basic sample on the question of how well one understood RCV based on the level of education, voting habits, or prior knowledge of RCV.

Chinatown: The proportion of Asians surveyed in the Chinatown precincts who said they knew they would be asked to rank BOS candidates was 64%. This compares to 68% of Asian-Americans in the basic sample. Twenty-one percent of the Asians we surveyed in Chinatown indicated a lack of understanding of RCV, compared to 13% of Asians in the basic sample. This is a meaningful difference that may be due to difficulties based on one's language skills. In the basic sample, 48% of Asian-Americans said that English was the first language they learned. In the Chinatown sample, only 20% of Asians said their first language was English. In addition, even controlling for language, it appears the Asians in Chinatown may have had more trouble understanding RCV than those living elsewhere. The proportion of Chinese speakers in the basic sample who indicated a lack of understanding is 16%, compared to 24% of Chinese speakers in Chinatown who said they did not understand RCV. That comparison should be taken cautiously due a small number of observations. However, it appears that, while the majority of Asians in Chinatown and elsewhere did understand the RCV ballot, those in Chinatown understood it less than did Asian-Americans from other parts of the city.

The Mission: Among the Latinos we surveyed in the Mission's precincts, 65% said they knew they would be asked to rank BOS candidates on the RCV ballot. This compares to 57% in the basic sample. In the basic sample, 20% of Latinos indicated a lack of understanding of RCV, compared to 13% of those we surveyed in the Mission. This suggests that Latinos in the Mission were more aware of, and had less difficulty with, RCV than Latinos elsewhere. However, these results should be taken cautiously due to the small number of cases.

Summary

In this section we examined how well voters understood the new RCV system. The vast majority of voters said they understood it fairly well or perfectly well (polling place = 86%, absentee = 89%). We attempt to identify factors that might explain one's inability to understand the ballot, focusing on groups who may be at risk in the transition to this new system. It should be clear that, although we emphasize the lack of understanding, the overall pattern displays a broad understanding.

Levels of understanding of the RCV ballot were lower among less educated voters, less wealthy voters, and voters whose first language is not English. Voters who knew about RCV before coming to the polls expressed higher levels of understanding. Also, understanding varied across racial/ethnic groups, listed from less to more understanding as follows: African-Americans, Latinos, "Others," Asian-Americans, and Whites. In addition, levels of understanding varied in expected ways according to one's attitudes. We found higher levels of understanding among voters who supported the RCV reform, made a first choice among BOS candidates easily, and were positively disposed toward change in general.

African-Americans appeared a bit different from other racial/ethnic groups. The more educated Blacks reported less, not more, understanding of RCV. Prior knowledge RCV did not appreciably change the level of understanding among Blacks, in sharp contrast to other races and ethnicities. And African-Americans who vote less frequently reported a much lower level of

understanding that other groups. Again, we offer these results cautiously since we have a small number of observations in some of the comparisons.

On average, Asians who live in Chinatown understood RCV less than did Asians living elsewhere. This does not appear to be a simple language barrier. Looking only at voters whose first language is Chinese, those in Chinatown report lower levels of understanding than those living in other parts of the city. By contrast, Latinos living in the Mission reported higher levels of prior knowledge and understanding of RCV than Latinos living in other areas. Due to the small number of observations, these results are tentative.

Prior knowledge of RCV appears to minimize the impact of language on one's understanding. Those who knew they would be asked to rank candidates reported significantly higher levels of understanding that did not vary greatly across language groups. By contrast, among those who did not have prior knowledge of RCV the lack of understanding was much more prevalent, with English and Chinese speakers faring better than Spanish speakers and others.

Understanding varied by age group, conditional on one's voting habits. Among respondents who said they always vote, we see little difference in understanding of RCV. However, among all other voters, younger respondents indicated much less understanding than older ones.

We now turn to the third variable of interest: the use of the RCV ballot and the question of how many candidates voters ranked.

3. Use of the Ranked-Choice Ballot

Respondents were asked how many candidates for the Board of Supervisors they actually ranked. The ballot provided three columns, allowing voters to rank up to three candidates. If a voter has clear preferences on that many candidates, then ranking the maximum allowable number of candidates may enhance a voter's enfranchisement. It is important, therefore, to determine how many voters actually made use of this option, and which voters were more or less likely to do so.⁸ About three in five voters surveyed reported ranking three candidates for the Board of Supervisors (59% of polling place voters and 60% of absentee voters). Fourteen percent of polling place voters and 16% of absentee voters ranked two candidates. Finally, nearly one-fourth of the voters ranked only one (23% polling place, 24% absentee).⁹ In what follows, unless noted otherwise, we report the results for polling place voters only.

Demographics

Gender, sexual orientation, age, income, political identity, and party affiliation were not related to the likelihood of ranking three candidates. However, education, first language, ethnicity and nativity were all related to the likelihood of ranking three candidates.

People with a high school degree or less were less likely to rank three candidates. While the majority of voters with at least some college (60%) ranked three candidates, 55% of those with a high school degree, and 43% of people who did not finish high school, ranked three. While

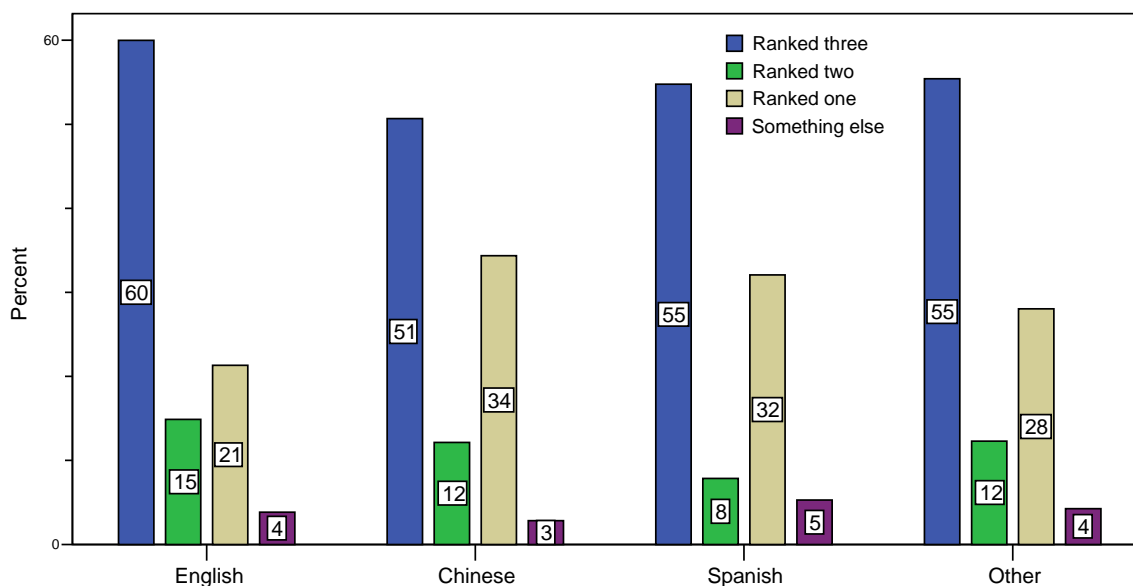
⁸ We recognize that ranking one candidate can, for some voters, be a full expression of their preferences. For instance, a voter may find only one acceptable candidate from the slate. Our focus here is on other factors that explain one's likelihood of ranking three candidates, especially in a newly implemented system.

⁹ The percentages of polling place voters does not add up to 100. This is because the exit poll questionnaire contained a fourth answer option, "something else," that the mail-in survey of absentee voters did not. Four percent of polling place voters chose that option.

about one-fourth (between 20% and 25%) of all others ranked only one candidate, 43% of those with less than a high school degree did so.

While a majority of all respondents (59%) ranked three choices, those who spoke English as a first language were a bit more likely to rank three choices (60%) than were those whose first language was Spanish, Chinese or some other language (51% to 54%).

Figure 18. Relationship Between First Language and Number of Candidates Ranked
(n = 2449; Chi-square = 25.18; p < .01)



Those who were born in the U.S. were somewhat more likely to rank three choices (60% vs. 54%), and those who were not born in the U.S. were more likely to rank only one (29% vs. 22%).

Whites were more likely (62% vs. 54%), and African Americans less likely (50% vs. 60%) to rank three candidates than were other races/ethnicities. However, this distinction decreases somewhat among those with higher levels of education (college graduate and above), suggesting that some but not all of the difference is related to education. Within racial and ethnic groups the difference one's education level and one's likelihood to rank three candidates is relatively small, except for Latinos. About 48% of Latinos without a college degree ranked three candidates, compared to 62% who have a college degree.

Figure 19. Relationship Between Race/Ethnicity and Number of Candidates Ranked
(n = 2569; Chi-square = 28.45; p < .01)

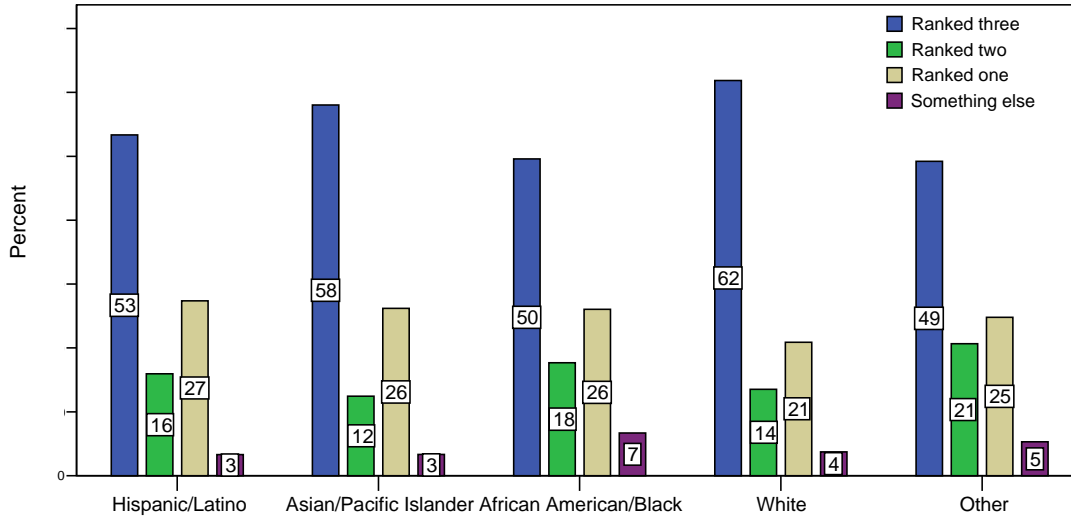
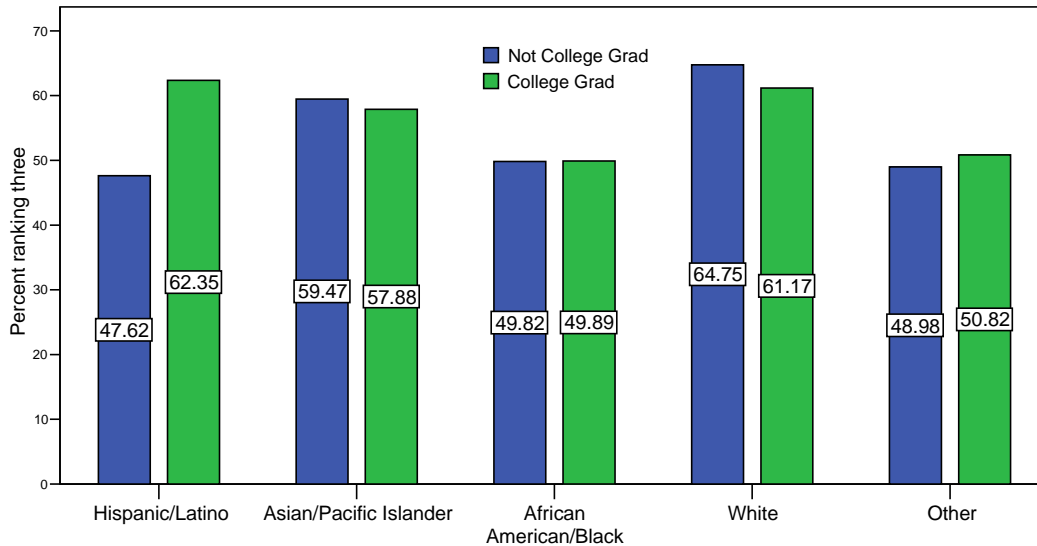


Figure 20. Relationship Between Race/Ethnicity, Educational Attainment & Number of Candidates Ranked
(n = 2567)



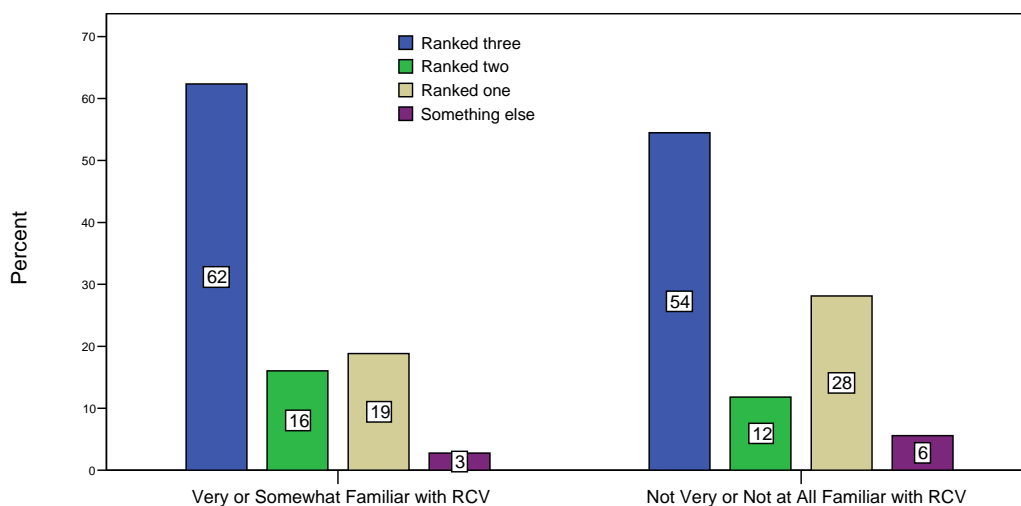
Within racial group comparisons across education levels: Chi-square Latino = 5.56, p < .02; Chi-square Asian = .12, p < .74; Chi-square Black = .00, p < 1.00; Chi-square White = 1.57, p < .22; Chi-square Other = .05, p < .82
Within education level comparisons across race/ethnicities: Chi-square Not College Grad = 17.51, p < .01; Chi-square College Grad = 6.76, p < .15

Less than half (46%) of occasional voters ranked three candidates compared 55% of those who “usually” vote in elections and 61% of those who “always” vote in elections. Nearly one in three “occasional” voters ranked only one candidate, vs. one in four of those who “usually” vote, and one in five of those who “always” vote. While a majority of first time voters (55%) ranked three candidates, 30% ranked only one.

Familiarity with Ranked-Choice Voting

Those who were more familiar with Ranked-Choice Voting were more likely to rank three candidates. Nearly two-thirds (64%) of those who knew prior to coming to the polls that they would be asked to rank candidates ranked three candidates versus only 47% of those who were unaware of the new development. The more familiar a voter was with Ranked-Choice voting prior to coming to the polls, the more likely he or she was to rank three candidates. For instance, 62% of those who were either “very familiar” or “somewhat familiar” with RCV reported ranking three candidates. By contrast the proportion who ranked three candidates among voters who were “not very familiar” or “not at all familiar” was 54%. Meanwhile, 19% of voters who were “not very familiar” or “not at all familiar” ranked only one candidate, versus 28% of those were not familiar.

Figure 21. Relationship Between Familiarity with RCV and Number of Candidates Ranked
(n = 2586; Chi-square = 50.60, p < .001)



We asked the voters who knew about RCV before coming to the polls how they had found out about it. Respondents chose from a list of possible sources, checking all that applied. The three most common sources for polling place voters were a newspaper (37%), the Department of Elections (DOE) literature or website (34%), and television (26%). For absentee voters, the most common sources were a newspaper (57%), the DOE (38%), and television (31%). Note that the small number of cases among absentee voters makes those estimates less accurate.

Table 7. Source of Prior Knowledge about RCV

Information source	Polling place (n = 1947)	Absentee (n = 161)
SF DOE literature or website	34%	38%
Candidate campaign literature or website	17%	14%
Other literature or website	12%	9%
Presentation at a club or organization	3%	5%
Newspaper	37%	57%
Television	26%	31%
Radio	18%	13%
Precinct worker	2%	3%
Family/friends/neighbors	16%	9%
Other source	11%	5%

Among polling place voters, we can examine the differences in the likelihood of ranking three candidates based on the source of information. Those who reported receiving information about RCV from the Department of Elections literature or website were more likely than others to rank three candidates (69% vs. 61%), as were those receiving information from other literature or websites (70% vs. 63%), and presentations at clubs or organizations (82% vs. 63%). By contrast, voters who received information from “other” sources were *less* likely to rank three candidates (57% vs. 65%). Meanwhile, there were smaller, negligible differences among voters who got information from candidates’ campaigns, newspapers, television, radio, precincts workers, and family, friends, or neighbors,

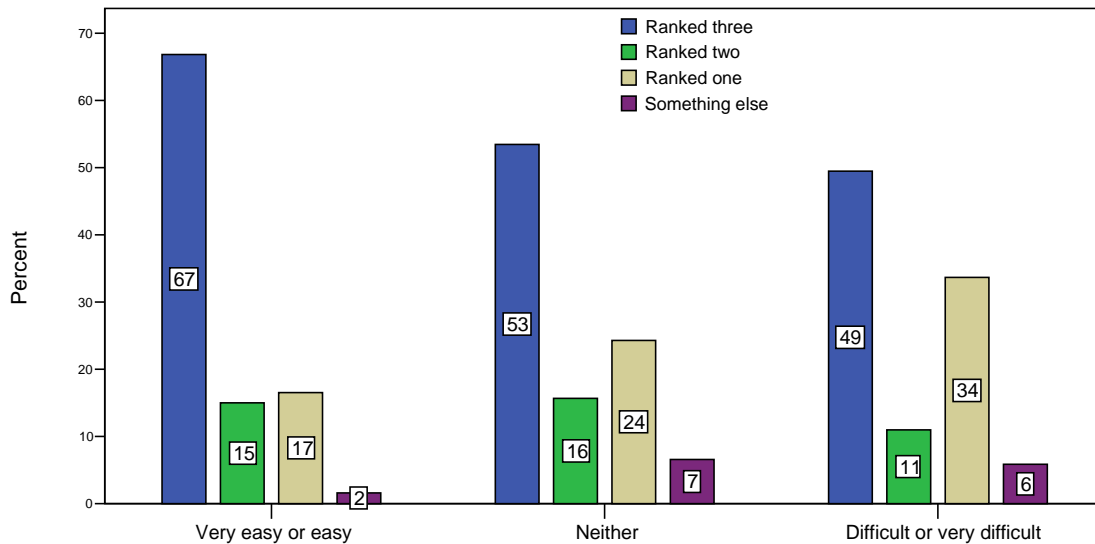
In general, the more sources of information a voter cited, the more likely he or she was to rank three candidates. Seventy-one percent of those citing three or more information sources ranked three candidates, while 57% of those citing less than three sources (including no sources) ranked three candidates. In a separate question, respondents were asked whether they had gathered more or less information on candidates during this BOS election, compared to prior elections. Again, those who reported gathering more information were more likely to report ranking three candidates (66%) compared to those who gathered neither more nor less (57%) and those who gathered less (50%).

Ease of Use

In addition to asking about voters’ overall understanding of the RCV ballot, we asked specifically how easy or difficult it was to rank one’s top three candidates. Not surprisingly, we find a relationship between how easy or difficult it was to rank three candidates and actually doing so. Those who found it “very easy” or “easy” were much more likely to rank three (67%)

than were those who found it “difficult” or “very difficult” (49%). A full 57% of those who found it “very difficult” ranked only one candidate.

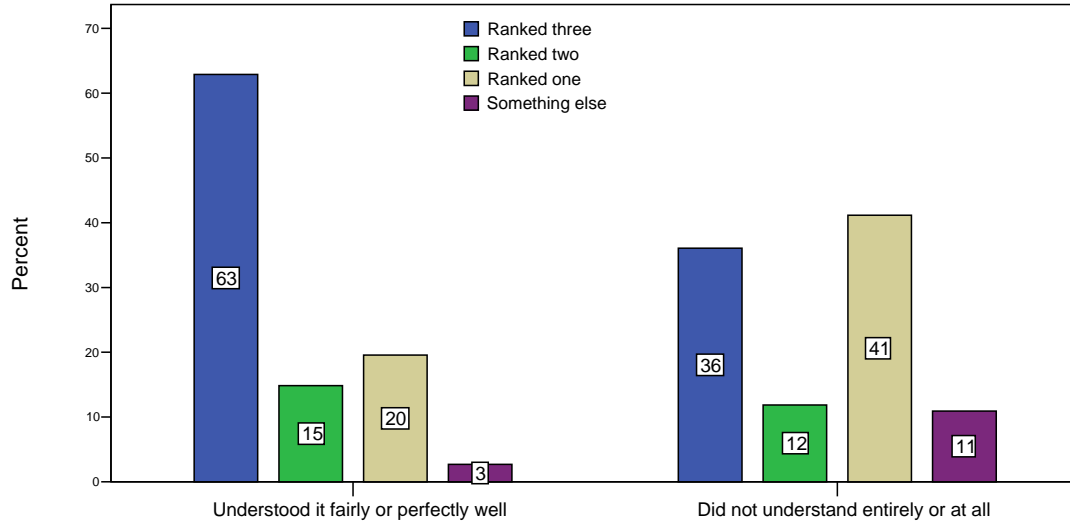
Figure 22. Relationship Between Ease of Ranking Three Candidates and Number of Candidates Ranked
(n = 2572; Chi-square = 116.02, p < .001)



However, those who looked for outside help in determining how to use the BOS ballot were no more or less likely to have ranked three candidates. Respondents were asked whether the vote scanning machine rejected their BOS ballots on the first attempt to submit the ballot. Eighty-five percent (85%) of those who reported a rejected ballot also reported ranking less than three candidates.

As for one’s overall understanding of the RCV ballot, 63% of those who understood it at least “fairly well” ranked three candidates, while only 36% of those who did not understand it entirely or at all ranked three candidates. Forty-one percent of those who indicated a lack of understanding reported ranking only one candidate, compared to 20% for those who said they understood.

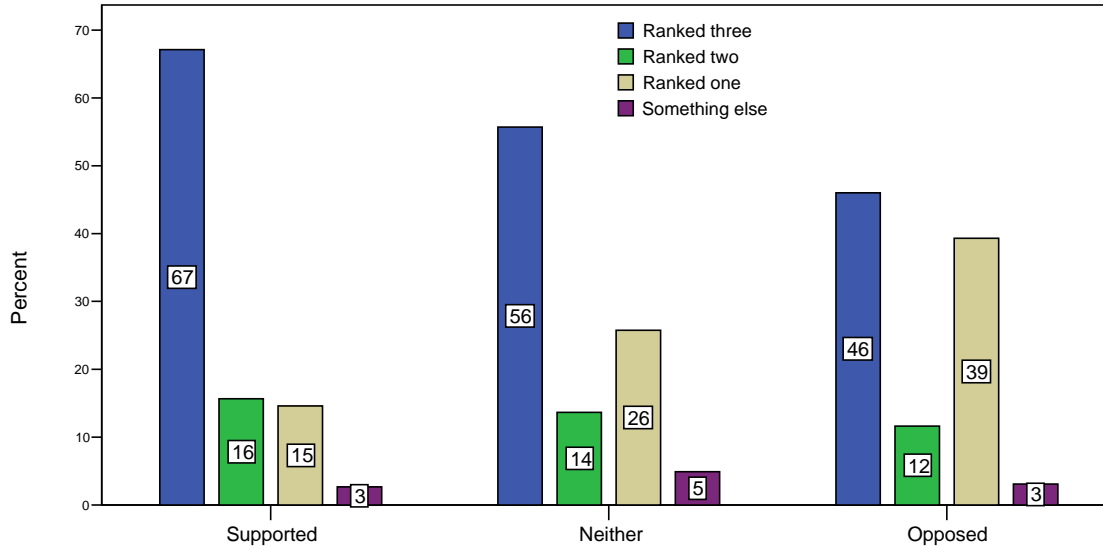
Figure 23. Relationship Between Understanding RCV and Number of Candidates Ranked
(n = 2557; Chi-square = 150.72, p < .001))



Opinions of Ranked-Choice Voting and Attitudes Toward Change

One's general attitude may also influence the likelihood of ranking three candidates. As explained in the previous section, we asked a broad question about respondents' preferences for "trying new things" versus those who prefer to "stay with traditional ways of doing things." Those who said it is better to try new things were more likely to rank three candidates (60%), while those who preferred traditional ways were less likely to do so (51%). Another general opinion that could lead some voters to be more willing to use RCV to its fullest is one's support or opposition to its implementation. Those who had supported RCV prior to coming to the polls were much more likely to have ranked three candidates than were those who were neutral or opposed. A full 39% of those opposed to RCV ranked only one candidate versus 15% of those who supported it.

Figure 24. Relationship Between Opinion of RCV and Number of Candidates Ranked
(n = 2533; Chi-square = 87.51, p < .001)



In a separate question, respondents were asked whether they preferred “this system with no December runoff election,” whether they preferred “the former system with a December runoff election,” or whether it made no difference to them. A majority of respondents to our exit poll (61%) preferred the new system; 13% said they preferred the runoff system, and 27% said it made “no difference” to them. Opinions were more positive among absentee voters, with 77% preferring the new system, 11% preferring the former runoff system, and 13% saying it made no difference. Among polling place voters, those who preferred the new system were much more likely to rank three candidates. Sixty-six percent (66%) of those who preferred the new system ranked three, as did 51% of those who were indifferent and 48% of those who preferred the old system.

Summary

In this section we explored what factors might lead voters to rank three candidates. About three in five voters did rank three candidates, while about one-fourth voted for only one. Polling place voters and absentee voters were virtually the same in this regard. Education, language, race and ethnicity, and nativity are all related to tendencies to rank three candidates. Differences in the number of candidates ranked were especially notable among the least educated. Also, the impact of education more generally is greater among Latinos than other racial/ethnic groups.

Voters who had prior knowledge of RCV and were more familiar with it tended to rank more candidates on the ballot. The most common sources of information for those who knew about it were newspapers, the DOE’s literature or website, and television. Those who learned about RCV from either the DOE website or literature, from some other website or literature, or from a club or organization were more likely to have ranked three candidates than those who heard about it through some other source.

Not surprisingly, those who found the ranking task itself easy and those who reported more overall understanding of RCV were more likely to rank three candidates. Finally, attitudes about

the RCV reform and about change in general were related to the number of candidates voters ranked. Respondents who expressed prior support of the reform, a current preference for RCV over the Runoff system, and who think it is better to try new things were all more likely to rank three candidates and less likely to choose just one.

4. Further Questions

Comparisons across BOS Districts

The exit poll was designed to allow estimates within the seven BOS districts. The table below presents those findings. The first three rows display the results for the main variables we considered in this report: prior knowledge of RCV, understanding of RCV, and full use of RCV. District 7 voters were most informed of RCV coming into the polling places. Seventy-seven percent of them knew they would be asked to rank BOS candidates. By contrast, in Districts 2 and 3 that proportion was 64%. Levels of understanding varied, too. Respondents in Districts 1 and 5 expressed more understanding (90% and 89%) than did voters in Districts 2, 3 and 11 (84%, 84%, and 83%). Next, we see large differences in the proportion of voters who ranked three candidates on the ballot, ranging from 46% in District 2 to 76% in District 5. Clearly, the nature of the race played a role here. District 5 had the most candidates on the ballot (22) and the highest incidence of voters ranking three candidates as opposed to ranking two or choosing one or none.

Table 8. Comparing Results across Districts

	D1	D2	D3	D5	D7	D9	D11	ALL
Had prior knowledge of RCV (Q 9)	73%	64%	64%	72%	77%	67%	66%	69%
Understood RCV fairly or perfectly well (Q 18)	90%	84%	84%	89%	88%	86%	83%	87%
Ranked three candidates (Q 15)	60%	46%	51%	76%	67%	56%	55%	59%
Prefer RCV system (Q 23)	54%	58%	62%	63%	66%	64%	56%	61%
Prefer Runoff system (Q 23)	17%	11%	12%	13%	12%	9%	16%	13%

The number of observations within the cells of this table range from 323 to 470

Differences across the districts on these questions were statistically significant: Chi-square for Q9 = 28.49, $p < .001$; Chi-square for Q18 = 13.33, $p < .04$; Chi-square for Q15 = 102.58, $p < .001$; Chi-square for Q23 (prefers RCV v. all others) = 19.00, $p < .01$; Chi-square for Q23 (prefers Runoff v. all others) = 15.61, $p < .02$

Finally, we report an indicator of support for RCV from responses to the question that asked if voters prefer RCV or the former runoff election system. Opinions varied, with District 7 and 9 showing the most positive reports (66% and 64% prefer RCV to the runoff system), and districts 1 and 11 showing the least positive (54% and 56% prefer RCV). We also report the proportion of voters who prefer the former Runoff system. District 9 and 2 show the least support for the former system (9% and 11%), while Districts 1 and 11 show the most (17% and 16%).

Possible Impacts of RCV¹⁰

Proponents of RCV systems have suggested that the nature of political campaigning and the voters' experience may change once RCV is implemented. We included a short series of questions that asked voters to compare their experience under the new RCV system to their experience under the former Runoff system.

Sincere Voting: One claim that RCV proponents make is that the voters will be more apt to vote sincerely. That is, they will be more likely than under the Runoff system to vote their true preference, and less likely to vote for someone else based on judgments about who is most likely to win. When we asked polling place respondents if they were more or less likely to vote for their most preferred candidate under the new system 46% said yes, while 3% said no, and 51% said there was no difference. Among absentee voters, 42% said they were more likely to vote for their most preferred candidate, 3% said less likely, and 56% reported no difference.

Wasted Votes: Along the same lines, the argument has been made that under the former Runoff system voters may feel their votes have been wasted. Under that system, if a race has two front runners and a field of other less popular candidates, then casting a single vote for one of the less popular candidates could lead to this feeling. By contrast, under the RCV system a voter has three rankings to distribute, knowing that if their first choice is the least popular their ballot will be transferred to their second choice. We asked respondents to compare this election to past BOS elections and tell us if they felt more or less like their vote was wasted this time. Among polling place voters 29% said they felt less like their vote was wasted, 7% said they felt more like it was wasted, and 64% noted no difference. Among absentee voters, 20% said "less," 7% said "more," and 74% said "no difference."

Positive/Negative Campaigns: It has also been suggested that campaign strategies may change under the RCV scheme, leading to less negative campaigns. Successful candidates might form coalitions with other candidates instead of setting themselves against the field. We asked whether voters thought the BOS campaigns in their districts were more or less negative than in past elections. Responses were fairly evenly split. Among polling place voters, 14% said "more negative," 15% said "less negative," and 71% saw no difference. Absentee voters were more likely to note differences from past elections, but otherwise concurred: 21% "more negative," 23% "less negative," and 56% "no difference."

Information Gathered: Finally, we were interested in the amount of information voters gathered for this election. It takes more information to rank three candidates than to pick one. Compared to past BOS elections, did voters gather more or less information about the candidates? Thirty-two percent of polling place voters said they gather more, 8% said they gathered less, and 53% said there was no difference. Absentee voters were a bit less likely to report gathering more information (24%), while 5% said they gathered less, and 68% reported no difference.

Old and New Attitudes about RCV

Our survey was designed to compare prior attitudes about RCV with voters impressions after having used it. It should be noted that since we interviewed voters as they exited the polling place, our measure of prior attitudes is subject to bias. That is, a voter's recent experience in the voting booth could influence their report of what his or her opinion was *before* entering the

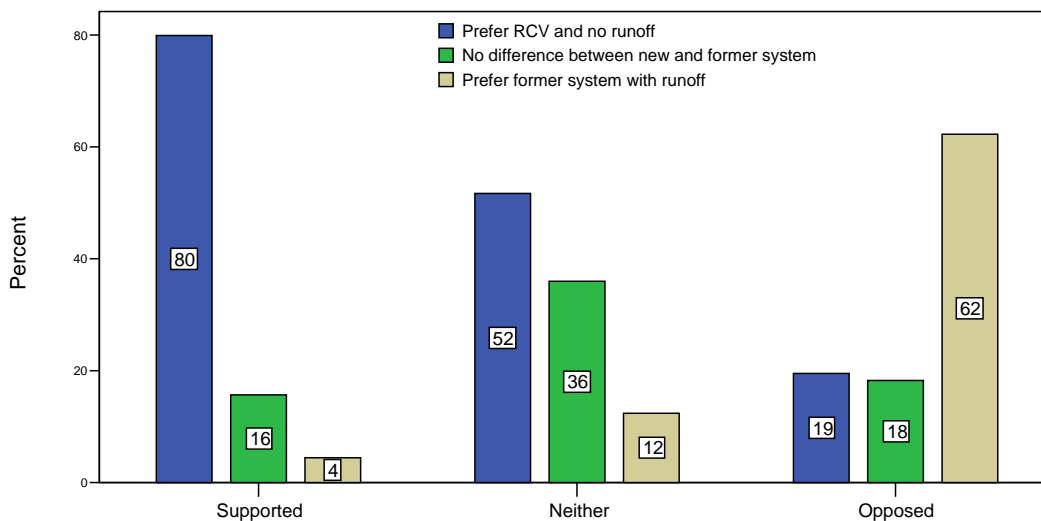
¹⁰ Bivariate reports of responses to the questions in this section may be found in the appendix.

voting booth. That said, it is still useful to compare responses to the question we asked early on in the survey about opinions of RCV before coming to vote with the responses to the question we asked near the end about voters' preference for the RCV or Runoff system.

From responses to the question placed early in the questionnaire we see that about two in five (39%) voters came to the polling place supporting RCV and 7% opposed it. Results from answers to the question near the end of the survey show that three in five (61%) said they preferred the RCV with no runoff, and 13% preferred the former system. The figure below compares those responses, with the horizontal axis showing prior attitudes (supported, neither, opposed), and the bars representing current attitudes (darkest = prefer RCV, medium = no difference, lightest = prefer Runoff). If there were no change in opinions, before and after using the RCV ballot, then we would expect the dark bar on the left side of the panel to be 100%, the light bar on the right side of the panel to be 100%, and the middle-toned bar in the middle section to be 100%. The degree to which that pattern does not hold suggests that some voters may have changed or developed new attitudes through the process of voting under the RCV system.

Two things are worth noting: First, nearly one in five respondents (19%) who initially opposed RCV say they now prefer it to the former system, while only 4% who came in supporting RCV now say they prefer the runoff system. Second, among respondents who had no clear prior opinion on RCV, about one-half (52%) say they now prefer RCV, while only about one-eighth (12%) say they prefer the former system.

Figure 25. Comparing Prior Opinions with Current Opinions on RCV



Summary

In this section we briefly report results across the seven BOS districts, and provide information on some of the expected impacts of the RCV reform. The largest differences across districts are found in the degree to which voters ranked three candidates. In District 7, which had an exceptionally large number of candidates running for an open seat, voters were much more likely to use all three columns of the RCV ballot. By contrast, voters in District 2 where an incumbent ran among fewer challengers were least likely to rank three candidates.

Claims about the potential impact of the RCV reform were examined through several questions that asked voters to compare this BOS election with past BOS elections. While most of the voters we asked reported no difference, those who did note differences tended to say they gathered more information, voted for their most preferred candidate, and felt less like their vote was wasted this time. Meanwhile, about equal proportions of respondents said the BOS campaign in their district was less negative as said it was more negative.

Finally, we attempted to gauge the degree to which opinions about RCV might have changed as a result of voters using the system for the first time. As expected, most people coming to the polls supporting it still support it, and most coming in opposing it still oppose it. However, the results indicate more positive than negative sentiment: First, about one if five voters who came to the polls opposing RCV now prefer it to the Runoff system. Second, among voters who had no clear prior opinion about RCV, about half now prefer it to the Runoff system, while about one-eighth now prefer the Runoff system.

SUMMARY

The purpose of this report has been to assess the transition from a Runoff system to a Ranked-Choice Voting (RCV) system in the San Francisco Board of Supervisors (BOS) elections. We emphasize the voters' experience as they cast their ballots: How easy or difficult was it for them to navigate the new system? Since voting is a fundamental political act in democratic society, we feel this is an appropriate focus.

The overall finding is positive. The majority of voters knew about Ranked-Choice voting, understood it, and used it to rank their preferences. Further, after having used it most say they prefer it to the former Runoff system.

Given the import of equality in the franchise, we choose to look at those minorities of voters who did not know about RCV, did not understand it, and did not use it to its fullest potential. No system is perfect and no transition flawless. However, it is important to note discrepancies in voters' experiences, especially among voters in expected risk groups. As to the question of what amount of unfamiliarity, misunderstanding, or misuse represents a critical compromise in citizens' political expression, we leave that debate for other venues. Our intent here is to provide evidence that will inform that discourse and help San Franciscans reach toward their ideals.

While most voters knew that they would be asked to rank BOS candidates, roughly one-third did not (31% polling place and 37% absentee). Among those who were less likely to know were the less educated, those whose first language is not English or Chinese, and races and ethnicities other than Asian or White. Also, less frequent voters were more likely to report being unaware of RCV. Lack of prior knowledge of RCV explained lower levels of understanding and lower incidences of ranking three candidates.

One especially striking finding is that, while levels of understanding varied significantly across language groups, no such differences were observed among respondents who knew beforehand that they would be asked to rank the BOS candidates. It was among the voters who did not have prior knowledge of RCV where language-based difficulties appeared.

Overall understanding of Ranked-Choice Voting was high, with about seven-eighths of our respondents saying they understood it fairly well or perfectly well. Again, if we look closer at specific groups, we see some are more at risk than others. As expected, voters with less education and lower incomes report less understanding. While ethnic and racial groups other than Whites and Asians indicated less understanding, Blacks merit a special comment. Several factors like education and prior knowledge mitigate a lack of understanding for other groups, but not among the African Americans we surveyed.

Another group of interest is the Asian-American community in Chinatown. Voters there appear to have had more difficulty with RCV than Asians elsewhere, and this is due to more than language. By contrast, Latinos we spoke with in the Mission seem to have had more prior knowledge and understanding of RCV than Latinos in other parts of the city.

While we cannot explain all of these findings with the data obtained, we can note that a pattern of connections emerges. For instance, prior knowledge of RCV is also related to one's tendency to rank three candidates on the ballot. While this may not be surprising, it is important, since a sizeable portion of the electorate lacked that knowledge.

Overall, about three in five voters ranked three candidates while almost one-fourth chose only one candidate, rates that are nearly identical for both polling place and absentee voters. It would be naïve to expect all voters to rank three candidates. Still, the factors that covary with those tendencies deserve scrutiny: Ranking three candidates was least common among African-Americans, Latinos, voters with less education, and people whose first language is not English.

Clearly, some of what shapes these tendencies toward awareness, understanding, and use of the ballot are influences that will always remain. For instance, we noted two such factors: voters' general dispositions and the nature of the district election. As it turns out, respondents' reports of how well they understood RCV and how many candidates they ranked are related to their opinions of RCV reform, to the difficulty they had choosing one candidate, and to their general attitudes toward change. It is not clear anything could be done to improve these voters' reports on our main measures of interest. Further, the evidence that the tendency to rank three candidates is campaign specific becomes clear when we compare Districts 5 and 2. Voters in District 5's large contest for an open seat ranked three candidates much more frequently than voters in District 2's smaller contest involving an incumbent. We encourage readers of this report to separate out malleable from intractable factors. It should be the goal of the community to address the former and learn to live with the latter.

We suggest that the focus of the community moving forward should be on the variations reported above based on one's education, income, race and ethnicity, and first language. And we wish to identify the lack of prior knowledge of RCV one of the most important and approachable problems.

Finally, we found generally positive responses to evaluative questions about Ranked-Choice Voting. About three in five polling place participants and over three-fourths of the absentee respondents say they prefer RCV to the Runoff system. Interesting results emerge when we

compare prior opinions about RCV with the question of which system voters prefer now. About one in five voters who came to the polls opposing RCV now prefer it to the Runoff system. And, among voters who had no clear prior opinions about RCV, about half now prefer it to the Runoff system, compared to about one-eighth who now prefer the Runoff system. These sentiments provide a positive context for the challenge of improving voters experience in future RCV elections.

APPENDIX A: Survey Questionnaire



San Francisco State University / City & County of San Francisco Ranked-Choice Voting (Instant Runoff Voting) Survey

You have been invited to participate in this survey because your precinct was selected to research public opinion about Ranked-Choice Voting, otherwise known as Instant Runoff Voting. This survey is completely anonymous--do not put your name on this form.

There are no risks or benefits to you participating in this survey. You may choose to participate or not. You may answer only the questions you feel comfortable answering, and you may stop at any time. If you do not wish to participate, you may simply return the blank survey, with no penalty to yourself. If you do participate, completion and return of the survey indicates your consent to the above conditions.

The survey should take approximately 5 minutes to complete. Any questions or concerns should be directed to: Lisel Blash, Project Coordinator, Public Research Institute, San Francisco State University, 415-338-6733

如果你需要中文版問卷，請向調查員索取。

Si prefiere recibir una copia de este cuestionario en Español, por favor pregunte al ayudante.

- | | |
|---|---|
| <p>1. What is your age?</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> 18-24</div> <div style="width: 33%;"><input type="checkbox"/> 40-49</div> <div style="width: 33%;"><input type="checkbox"/> 70-79</div> <div style="width: 33%;"><input type="checkbox"/> 25-29</div> <div style="width: 33%;"><input type="checkbox"/> 50-59</div> <div style="width: 33%;"><input type="checkbox"/> 79 & older</div> <div style="width: 33%;"><input type="checkbox"/> 30-39</div> <div style="width: 33%;"><input type="checkbox"/> 60-69</div> </div> <p>2. What was the last grade of school you completed?</p> <div style="display: flex; flex-direction: column;"> <input type="checkbox"/> Did not finish high school <input type="checkbox"/> High school graduate or GED <input type="checkbox"/> Some college or Associate Degree <input type="checkbox"/> College graduate <input type="checkbox"/> Post-graduate study </div> <p>3. What is your Race or Ethnicity?</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Hispanic/Latino</div> <div style="width: 50%;"><input type="checkbox"/> White</div> <div style="width: 50%;"><input type="checkbox"/> Asian/ Pacific Islander</div> <div style="width: 50%;"><input type="checkbox"/> American Indian</div> <div style="width: 50%;"><input type="checkbox"/> African American/ Black</div> <div style="width: 50%;"><input type="checkbox"/> Other</div> </div> <p>4. What is the first language you learned to speak?</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> English</div> <div style="width: 50%;"><input type="checkbox"/> Spanish</div> <div style="width: 50%;"><input type="checkbox"/> Chinese</div> <div style="width: 50%;"><input type="checkbox"/> Other</div> </div> <p>5. Were you born in the U.S.?</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Yes</div> <div style="width: 50%;"><input type="checkbox"/> No</div> </div> <p>6. Please check the box that best represents your household's total yearly income.</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Less than \$10,000</div> <div style="width: 50%;"><input type="checkbox"/> \$50,000-\$74,999</div> <div style="width: 50%;"><input type="checkbox"/> \$10,000-\$19,999</div> <div style="width: 50%;"><input type="checkbox"/> \$75,000-\$99,999</div> <div style="width: 50%;"><input type="checkbox"/> \$20,000-\$49,999</div> <div style="width: 50%;"><input type="checkbox"/> \$100,000 or more</div> </div> <p>7. Which comes closer to your view?</p> <div style="display: flex; flex-direction: column;"> <input type="checkbox"/> It's better to try new things than to stay with the traditional ways of doing things <input type="checkbox"/> It's better to stay with the traditional ways of doing things than to change </div> <p>8. How often would you say you vote in elections?</p> <div style="display: flex; flex-direction: column;"> <input type="checkbox"/> Never before this time <input type="checkbox"/> Occasionally <input type="checkbox"/> Usually <input type="checkbox"/> Always </div> | <p>9. Before coming to vote today, did you know you would be asked to rank your choices for the Board of Supervisors?</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Yes</div> <div style="width: 50%;"><input type="checkbox"/> No</div> </div> <p>10. If you knew about Ranked Choice Voting (Instant Runoff) before coming to vote today, how did you find out about it? (Check all that apply)</p> <div style="display: flex; flex-direction: column;"> <input type="checkbox"/> SF Dept. of Elections literature and/or website <input type="checkbox"/> Candidate campaign literature and/or website <input type="checkbox"/> Other literature or website/internet <input type="checkbox"/> Presentation at club or organization <input type="checkbox"/> Newspaper <input type="checkbox"/> Television <input type="checkbox"/> Radio <input type="checkbox"/> Precinct worker <input type="checkbox"/> Family, friends or neighbors <input type="checkbox"/> Other </div> <p>11. Before coming to vote today, how familiar were you with Ranked-Choice Voting (Instant Runoff Voting)?</p> <div style="display: flex; flex-direction: column;"> <input type="checkbox"/> Very familiar <input type="checkbox"/> Somewhat familiar <input type="checkbox"/> Not very familiar <input type="checkbox"/> Not at all familiar </div> <p>12. Before coming to vote today, what was your opinion of Ranked-Choice Voting (Instant Runoff Voting)?</p> <div style="display: flex; flex-direction: column;"> <input type="checkbox"/> Supported it <input type="checkbox"/> Neither supported nor opposed it <input type="checkbox"/> Opposed it </div> <p>13. Sometimes it's easy to choose a favorite candidate from among those running, and other times it's hard. What about this election and the Board of Supervisors race? How easy or difficult was it for you to decide who your first choice was?</p> <div style="display: flex; flex-direction: column;"> <input type="checkbox"/> Very Easy <input type="checkbox"/> Easy <input type="checkbox"/> Neither Difficult nor Easy <input type="checkbox"/> Difficult <input type="checkbox"/> Very Difficult <input type="checkbox"/> I didn't vote for the Board of Supervisors (Please skip to Question 22) </div> |
|---|---|

PLEASE TURN THE QUESTIONNAIRE OVER ➡

14. What about ranking your top three choices for the Board of Supervisors? Was that

- ☐ Very Easy
☐ Easy
☐ Neither Difficult nor Easy
☐ Difficult
☐ Very Difficult

15. When you first filled out your ballot for the Board of Supervisors, did you

- ☐ Rank three candidates
☐ Rank two candidates
☐ Vote for only one candidate
☐ Something else

16. When you first filled out that part of the ballot, did you ask for help from anyone or refer to written information to determine how to rank your choices?

- ☐ Yes ☐ No

17. When you first put your ballot for the Board of Supervisors in the scanning machine, did it return the ballot to you?

- ☐ Yes ☐ No

17a. If yes, what did you do before putting it in the machine a second time?

- ☐ Made changes to the ballot
☐ Made no changes to the ballot
☐ Got a new ballot

18. Overall, how would you describe your experience with Ranked-Choice Voting for the Board of Supervisors?

- ☐ Understood it perfectly well
☐ Understood it fairly well
☐ Did not understand it entirely
☐ Did not understand it at all

The next questions ask you to compare this election using Ranked-Choice Voting to the former system in which you voted for one candidate to the Board of Supervisors.

19. Compared to past elections for the Board of Supervisors, how much information did you gather about the candidates before voting today?

- ☐ More than in past elections
☐ No difference
☐ Less than in past elections
☐ This is the first time I have voted (skip to Question 22)

20. Sometimes people vote for their most preferred candidate, and sometimes they vote for a candidate because he or she is more likely to win. Compared to past elections for the Board of Supervisors, were you more or less likely to vote for your most preferred candidate today?

- ☐ More likely
☐ No difference
☐ Less likely

21. Sometimes voters feel like their vote is wasted, or doesn't count for much in an election. What about you? Compared to past elections for the Board of Supervisors, which best describes you?

- ☐ Felt more like my vote was wasted this time
☐ No difference
☐ Felt less like my vote was wasted this time

22. Thinking just about the campaign for the Board of Supervisors in your district, was it more or less negative than in past elections?

- ☐ More negative than past elections
☐ No difference
☐ Less negative than past elections

23. With the Ranked-Choice Voting system (Instant Runoff), there will be no run-off election held in December. Which would you say describes you best?

- ☐ I prefer this system with no December runoff election
☐ No difference to me between this and the former system
☐ I prefer the former system with a December runoff election

24. What is your gender?

- ☐ Female ☐ Male

25. On most political matters, do you consider yourself:

- ☐ Very liberal
☐ Liberal
☐ Moderate
☐ Conservative
☐ Very conservative

26. No matter how you voted today, do you usually think of yourself as:

- ☐ Republican ☐ Independent
☐ Democrat ☐ Something else

27. What is your sexual orientation?

- ☐ Straight ☐ Gay/Lesbian
/Bisexual

Please fold your questionnaire and put it in the box.

If you would like to participate in a post-election focus group on Ranked Choice/Instant Runoff Voting, please sign up with one of our student pollsters.

Thank you!

Public Research Institute, SFSU, 1600 Holloway Ave, San Francisco, CA 94132

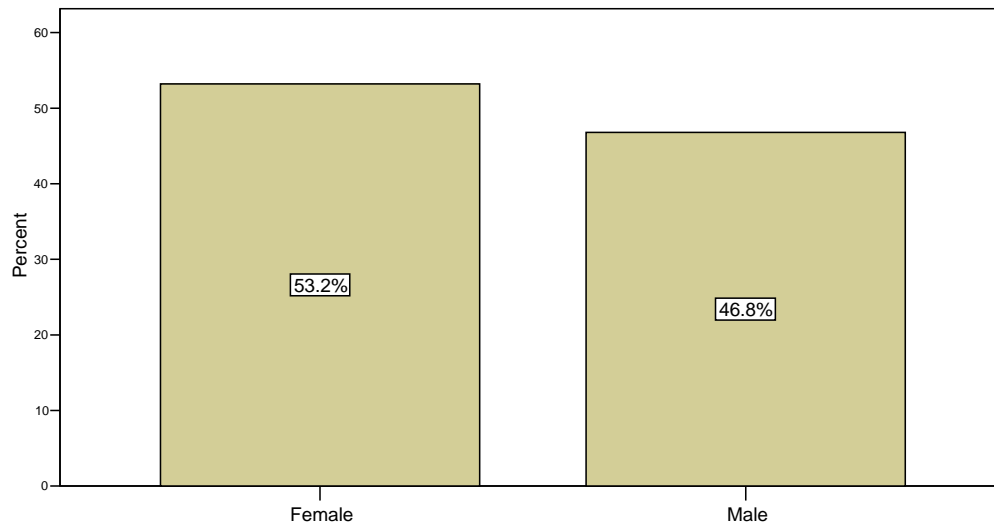
APPENDIX B: Demographics

In this section, we report the demographic makeup of the sample in the basic exit poll survey, not including special neighborhoods and not including the absentee survey. It is important to note that the demographic profile of voters does not match that of the general population. Therefore, while we sampled precincts based on how closely they resemble the demographics of the district, our respondents will look somewhat different than the district as a whole.

Voting registration and turnout among eligible voters varies by education, income, age, and race and ethnicity. In addition, some districts may contain disproportionate numbers of ineligible voters, like people who are too young or who are not citizens. Finally, more than one-third of San Francisco voters filed absentee ballots and a large number used early voting. It is possible that early and absentee voters may differ from those who came to the polls on Election Day.

In the following sections, the data are weighted based on turnout. Weighting generally made no more than a 1% difference in most demographic variables. For information on the weight and a list of precincts, please see the section of this report on methods. Also, for a full report on the counts of each of these variables, please refer to the Appendix that reports the frequency of all questions asked in the survey.

Figure 26. Gender (n = 2727)



/

Figure 27. Sexual Orientation (n = 2645)

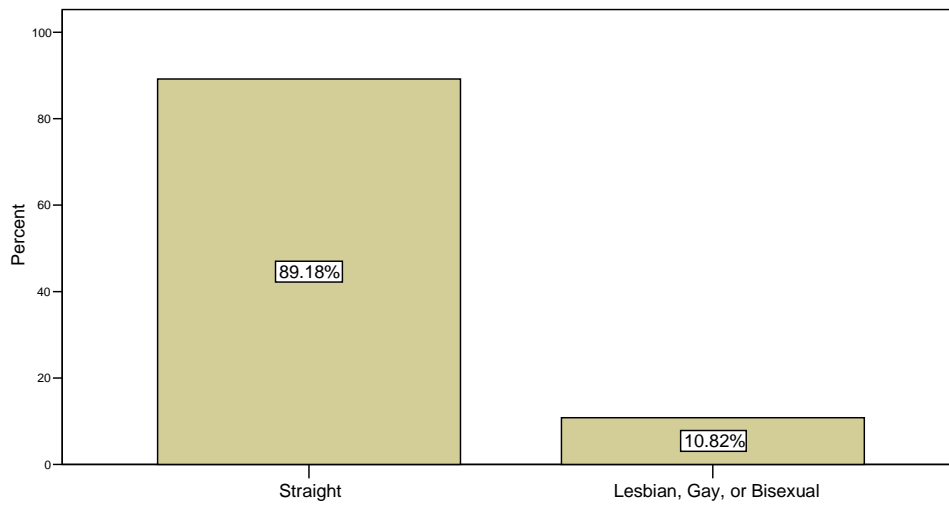


Figure 28. Age (n = 2839)

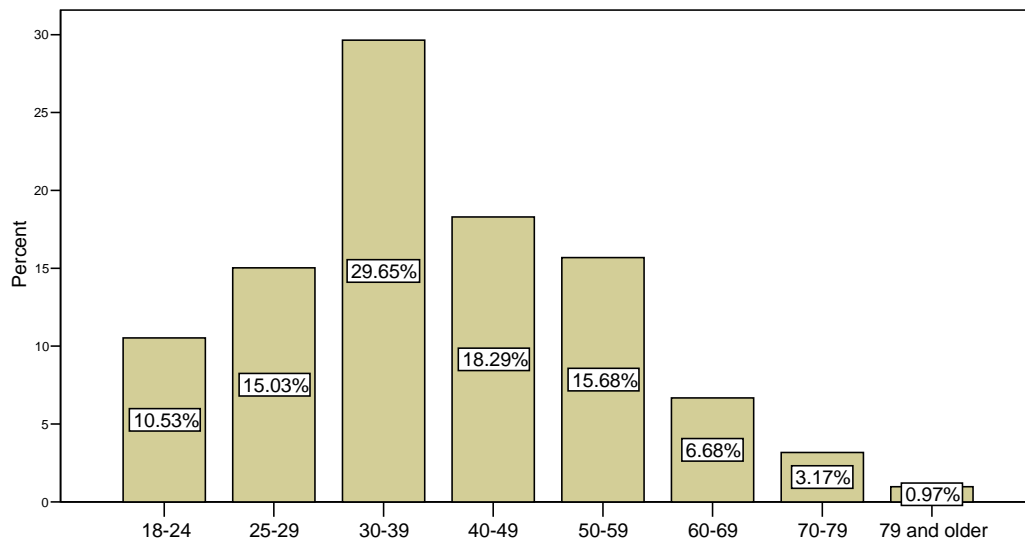


Figure 29. Education (n = 2814)

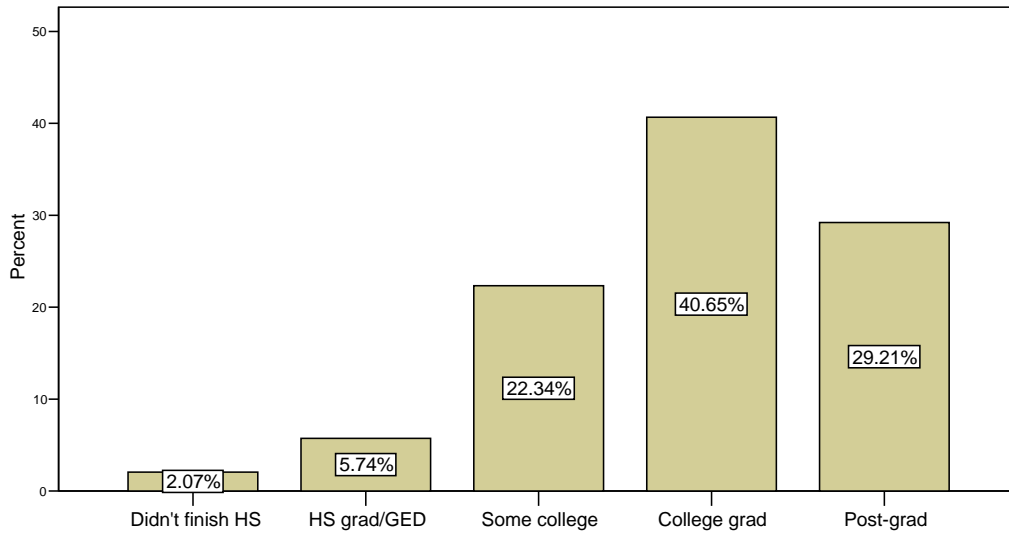


Figure 30. Annual Household Income (n = 2757)

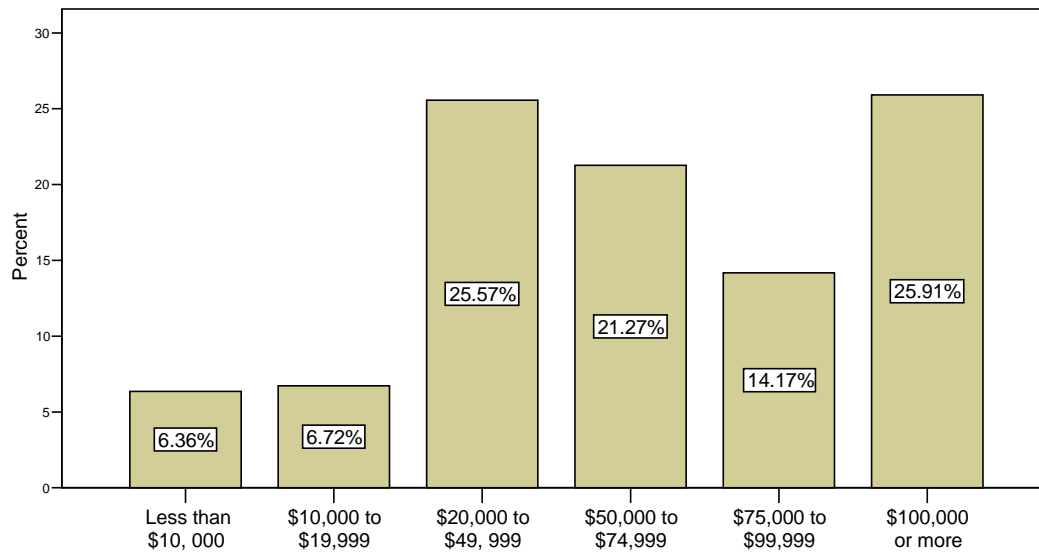


Figure 31. Place of Birth (n = 2824)

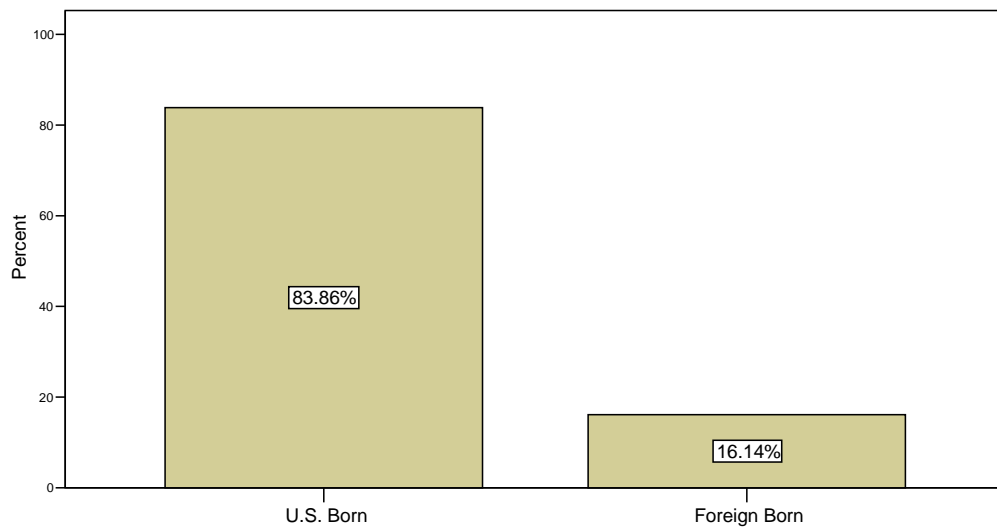


Figure 32. First Language (n = 2792)

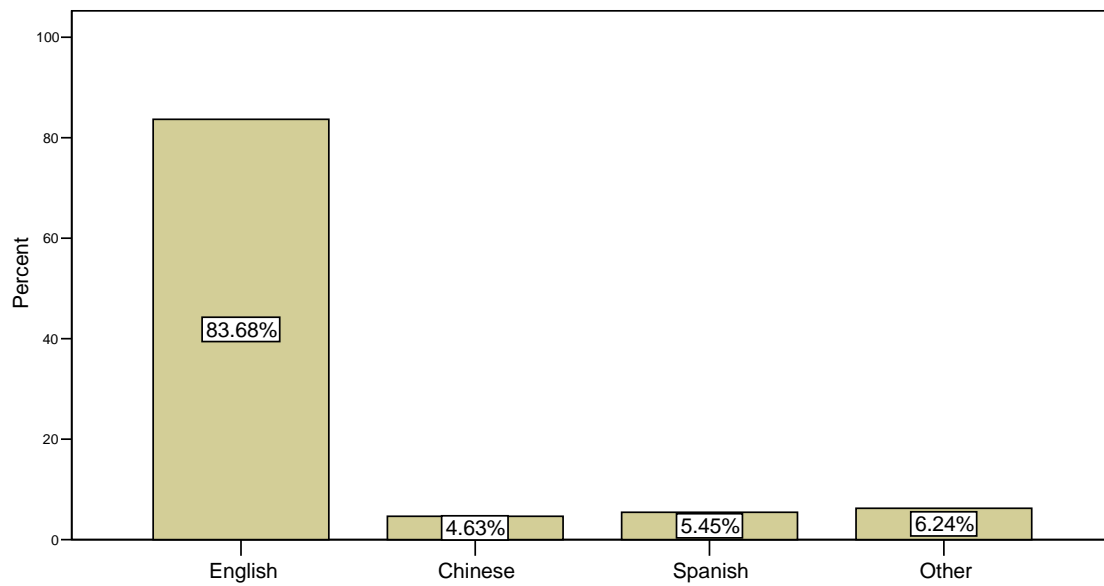
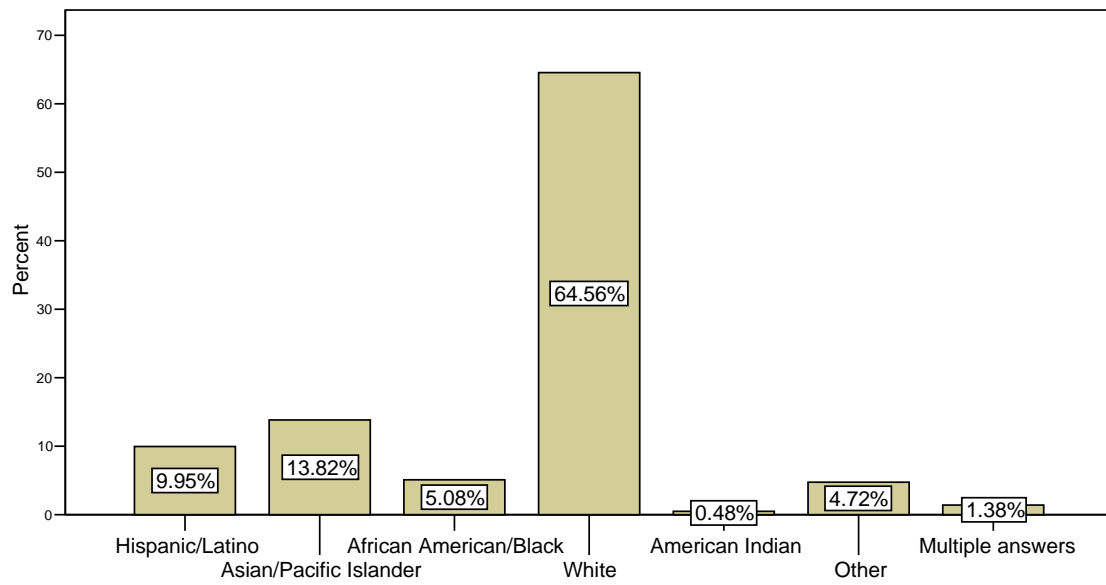


Figure 33. Race and Ethnicity (n = 2816)



APPENDIX C: Frequencies, Basic Precincts Sample

Note: Data are weighted.

For the full wording of the answer options, please see the questionnaire included in this report.

1. What is your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	299	10.5	10.5	10.5
	25-29	427	15.0	15.0	25.6
	30-39	842	29.6	29.6	55.2
	40-49	519	18.2	18.3	73.5
	50-59	445	15.6	15.7	89.2
	60-69	190	6.7	6.7	95.9
	70-79	90	3.2	3.2	99.0
	79 and older	28	1.0	1.0	100.0
	Total	2839	99.7	100.0	
Missing	Suspect answer	1	.0		
	Missing	6	.2		
	Total	8	.3		
Total		2847	100.0		

2. What was the last grade of school you completed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Didn't finish HS	58	2.0	2.1	2.1
	HS grad/GED	161	5.7	5.7	7.8
	Some college	628	22.1	22.3	30.1
	College grad	1144	40.2	40.7	70.8
	Post-grad	822	28.9	29.2	100.0
	Total	2814	98.8	100.0	
Missing	Multiple answers	25	.9		
	Missing	8	.3		
	Total	33	1.2		
Total		2847	100.0		

3. What is your Race or Ethnicity?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hispanic/Latino	280	9.8	9.9	9.9
	Asian/Pacific Islander	389	13.7	13.8	23.8
	African American/Black	143	5.0	5.1	28.9
	White	1818	63.8	64.6	93.4
	American Indian	14	.5	.5	93.9
	Other	133	4.7	4.7	98.6
	Multiple answers	39	1.4	1.4	100.0
	Total	2816	98.9	100.0	
Missing	Suspect answer	1	.0		
	Missing	31	1.1		
	Total	31	1.1		
Total		2847	100.0		

4. What is the first language you learned to speak?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	2337	82.1	83.7	83.7
	Chinese	129	4.5	4.6	88.3
	Spanish	152	5.3	5.5	93.8
	Other	174	6.1	6.2	100.0
	Total	2792	98.1	100.0	
Missing	Suspect answer	3	.1		
	Multiple answers	41	1.4		
	Missing	11	.4		
	Total	55	1.9		
Total		2847	100.0		

5. Were you born in the U.S.?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2368	83.2	83.9	83.9
	No	456	16.0	16.1	100.0
	Total	2824	99.2	100.0	
Missing	Missing	23	.8		
Total		2847	100.0		

6. Please check the box that best represents your household's total yearly income.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$10, 000	175	6.2	6.4	6.4
	\$10,000 to \$19,999	185	6.5	6.7	13.1
	\$20,000 to 49, 999	705	24.8	25.6	38.6
	\$50,000 to 74,999	586	20.6	21.3	59.9
	\$75,000 to \$99,999	391	13.7	14.2	74.1
	\$100,000 or more	714	25.1	25.9	100.0
	Total	2757	96.8	100.0	
Missing	Multiple answers	4	.1		
	Missing	86	3.0		
	Total	90	3.2		
Total		2847	100.0		

7. Which comes closer to your view?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	It's better to try new things than to stay with the traditional ways of doing things	2322	81.6	89.1	89.1
	It's better to stay with the traditional ways of doing things than to change	284	10.0	10.9	100.0
	Total	2606	91.5	100.0	
Missing	Suspect answer	4	.2		
	Multiple answer	7	.2		
	Missing	230	8.1		
	Total	241	8.5		
Total		2847	100.0		

8. How often would you say you vote in elections?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never before this time	211	7.4	7.5	7.5
	Occasionally	102	3.6	3.6	11.0
	Usually	532	18.7	18.7	29.8
	Always	1992	70.0	70.2	100.0
	Total	2837	99.6	100.0	
Missing	Missing	10	.4		
Total		2847	100.0		

9. Before coming to vote today, did you know that you would be asked to rank your choices for the BOS?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1953	68.6	69.0	69.0
	No	879	30.9	31.0	100.0
	Total	2832	99.5	100.0	
Missing	Suspect answer	1	.0		
	Multiple answers	2	.1		
	Missing	12	.4		
	Total	15	.5		
Total		2847	100.0		

10. If you knew about Ranked Choice Voting (Instant Runoff) before coming to vote today, how did you find out about it? (Check all that apply.)

	True		False		Total	
	Count	%	Count	%	Count	%
SF DOE literature and/or website	659	33.8%	1288	66.2%	1947	100.0%
Candidate campaign literature and/or website	325	16.7%	1622	83.3%	1947	100.0%
Other literature and/or website	232	11.9%	1715	88.1%	1947	100.0%
Presentation at club or organization	64	3.3%	1883	96.7%	1947	100.0%
Newspaper	710	36.5%	1237	63.5%	1947	100.0%
Television	512	26.3%	1435	73.7%	1947	100.0%
Radio	347	17.8%	1600	82.2%	1947	100.0%
Precinct worker	41	2.1%	1906	97.9%	1947	100.0%
Family, friends or neighbors	304	15.6%	1643	84.4%	1947	100.0%
Other	214	11.0%	1733	89.0%	1947	100.0%

11. Before coming to vote today, how familiar were you with Ranked-Choice Voting (Instant Runoff Voting)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very	585	20.5	20.7	20.7
	Somewhat	1017	35.7	35.9	56.6
	Not very	649	22.8	22.9	79.5
	Not at all	580	20.4	20.5	100.0
	Total	2830	99.4	100.0	
Missing	Multiple answers	2	.1		
	Missing	16	.5		
	Total	17	.6		
Total		2847	100.0		

12. Before coming to vote today, what was your opinion of Ranked Choice Voting (Instant Runoff Voting)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Supported	1085	38.1	39.3	39.3
	Neither	1483	52.1	53.7	93.0
	Opposed	194	6.8	7.0	100.0
	Total	2762	97.0	100.0	
Missing	Suspect answer	3	.1		
	Multiple answers	7	.3		
	Missing	76	2.7		
	Total	85	3.0		
Total		2847	100.0		

13. How easy or difficult was it for you to decide who your first choice was?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very easy	795	27.9	28.4	28.4
	Easy	792	27.8	28.3	56.6
	Neither	692	24.3	24.7	81.3
	Difficult	339	11.9	12.1	93.4
	Very difficult	71	2.5	2.5	96.0
	Did not vote for BOS	113	4.0	4.0	100.0
	Total	2801	98.4	100.0	
Missing	Multiple answers	14	.5		
	Missing	31	1.1		
	Total	46	1.6		
Total		2847	100.0		

**14. What about ranking your top three choices for the Board of Supervisors?
Was that**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very easy	488	17.1	18.7	18.7
	Easy	821	28.8	31.5	50.2
	Neither	782	27.5	30.0	80.2
	Difficult	415	14.6	15.9	96.1
	Very difficult	101	3.6	3.9	100.0
	Total	2608	91.6	100.0	
Missing	Suspect answer	2	.1		
	Multiple answers	2	.1		
	Missing	236	8.3		
	Total	239	8.4		
Total		2847	100.0		

15. When you first filled out your ballot for the Board of Supervisors, did you

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rank three	1532	53.8	59.0	59.0
	Rank two	372	13.1	14.3	73.3
	Only one	591	20.8	22.8	96.1
	Something else	102	3.6	3.9	100.0
	Total	2597	91.2	100.0	
Missing	Suspect answer	2	.1		
	Multiple answers	3	.1		
	Missing	245	8.6		
	Total	250	8.8		
Total		2847	100.0		

16. When you first filled out that part of the ballot, did you ask for help from anyone or refer to written information to determine how to rank your choices?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	352	12.4	13.5	13.5
	No	2248	79.0	86.5	100.0
	Total	2600	91.3	100.0	
Missing	Suspect answer	1	.0		
	Multiple answers	1	.0		
	Missing	245	8.6		
	Total	247	8.7		
Total		2847	100.0		

17. When you first put your ballot for the BOS in the scanning machine, did it return the ballot to you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	637	22.4	26.0	26.0
	No	1808	63.5	74.0	100.0
	Total	2445	85.9	100.0	
Missing	Suspect answer	2	.1		
	Multiple answers	1	.0		
	Missing	399	14.0		
	Total	402	14.1		
Total		2847	100.0		

17a. If yes, what did you do before putting it in the machine the second time?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Changes	77	2.7	10.8	10.8
	No changes	583	20.5	82.4	93.2
	New Ballot	48	1.7	6.8	100.0
	Total	708	24.9	100.0	
Missing	Missing	2139	75.1		
Total		2847	100.0		

18. Overall, how would you describe you experience with Ranked-Choice Voting for the BOS?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Understood perfectly well	1334	46.9	51.6	51.6
	Understood fairly well	900	31.6	34.8	86.5
	Did not understand entirely	280	9.8	10.8	97.3
	Did not understand at all	69	2.4	2.7	100.0
	Total	2583	90.7	100.0	
Missing	Suspect answer	5	.2		
	Multiple answer	4	.1		
	Missing	255	9.0		
	Total	264	9.3		
Total		2847	100.0		

19. Compared to past elections for the BOS, how much information did you gather about candidates before voting today?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More	807	28.3	31.8	31.8
	No difference	1330	46.7	52.5	84.3
	Less	189	6.6	7.5	91.7
	First time vote	210	7.4	8.3	100.0
	Total	2535	89.1	100.0	
Missing	Suspect answer	3	.1		
	Missing	308	10.8		
	Total	312	10.9		
Total		2847	100.0		

20. Compared to past elections for the BOS, were you more or less likely to vote for your most preferred candidate today?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More likely	1106	38.9	46.1	46.1
	No difference	1225	43.0	51.0	97.1
	Less likely	71	2.5	2.9	100.0
	Total	2402	84.4	100.0	
Missing	Suspect answer	1	.1		
	Multiple answer	1	.0		
	Missing	443	15.6		
	Total	445	15.6		
Total		2847	100.0		

21. Sometimes voters feel like their vote is wasted, or doesn't count for much in an election. What about you? Compared to past elections for the BOS, which best describes you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Felt more like my vote was wasted this time	162	5.7	6.8	6.8
	No difference	1540	54.1	64.2	71.0
	Felt less like my vote was wasted this time	697	24.5	29.0	100.0
	Total	2399	84.3	100.0	
Missing	Suspect answer	1	.1		
	Multiple answer	2	.1		
	Missing	445	15.6		
	Total	448	15.7		
Total		2847	100.0		

22. Thinking just about the campaign for the BOS in your district, was it more or less negative than in past elections?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More negative	364	12.8	14.3	14.3
	No difference	1803	63.3	70.6	84.9
	Less negative	386	13.5	15.1	100.0
	Total	2553	89.7	100.0	
Missing	Suspect answer	2	.1		
	Multiple answers	2	.1		
	Missing	290	10.2		
	Total	294	10.3		
Total		2847	100.0		

23. With the Ranked-Choice Voting system (Instant Runoff), there will be no runoff held in December. Which would you say describes you best?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Prefer no runoff	1585	55.7	60.5	60.5
	No difference	698	24.5	26.6	87.1
	Prefer runoff	337	11.8	12.9	100.0
	Total	2620	92.0	100.0	
Missing	Multiple answer	1	.0		
	Missing	226	7.9		
	Total	227	8.0		
Total		2847	100.0		

24. What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	1451	51.0	53.2	53.2
	Male	1276	44.8	46.8	100.0
	Total	2727	95.8	100.0	
Missing	Suspect Answer	1	.0		
	Multiple answers	1	.0		
	Missing	117	4.1		
	Total	120	4.2		
Total		2847	100.0		

25. On most political matters, do you consider yourself:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very liberal	528	18.6	19.6	19.6
	Liberal	1158	40.7	42.9	62.4
	Moderate	777	27.3	28.8	91.2
	Conservative	202	7.1	7.5	98.7
	Very conservative	35	1.2	1.3	100.0
	Total	2701	94.9	100.0	
Missing	Suspect answer	3	.1		
	Multiple answers	15	.5		
	Missing	128	4.5		
	Total	146	5.1		
Total		2847	100.0		

26. No matter how you voted today, do you usually think of yourself as:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Republican	244	8.6	9.0	9.0
	Democrat	1720	60.4	63.7	72.7
	Independent	453	15.9	16.8	89.5
	Something else	283	9.9	10.5	100.0
	Total	2699	94.8	100.0	
Missing	Suspect answer	3	.1		
	Multiple answers	18	.6		
	Missing	128	4.5		
	Total	148	5.2		
Total		2847	100.0		

27. What is your sexual orientation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Straight	2359	82.9	89.2	89.2
	Gay	286	10.0	10.8	100.0
	Total	2645	92.9	100.0	
Missing	Suspect answer	2	.1		
	Multiple answer	2	.1		
	Missing	198	6.9		
	Total	202	7.1		
Total		2847	100.0		

APPENDIX C: Bivariate Report on Select Variables
(Basic Precinct Sample: Q9, Q14, Q15, Q18, Q19, Q20, Q21, Q22, Q23)

Note: All data are weighted. Caution should be exercised in interpreting estimates drawn from a small number of cases.

Percentages are row percentages; in other words, percentage of each demographic category that answered the question this way.

Table 9. Before coming to vote today, did you know that you would be asked to rank your choices for the BOS? (Q9)

Percent Aware of RCV Prior to Coming to Vote		Percent "Yes-Knew"	Sample N
Total Sample (all voters surveyed)		69.00%	2,832
By Race/Ethnicity:	Hispanic/Latino	57.05%	276
	Asian/PI	68.44%	389
	African American/Black	58.26%	139
	White	72.19%	1,813
	American Indian	60.14%	14
	Other	66.18%	132
	Multiple Answers	46.47%	39
By First Language:	English	70.01%	2,328
	Chinese	69.36%	129
	Spanish	55.86%	148
	Other	63.38%	174
By District:	District 1	73.16%	389
	District 2	64.29%	426
	District 3	64.10%	426
	District 5	71.75%	470
	District 7	77.28%	367
	District 9	66.58%	401
	District 11	66.23%	352
By Income:	Less than \$10,000	56.08%	717
	\$10,000 - \$19,999	59.68%	185
	\$20,000 - \$49,999	68.47%	702
	\$50,000 - \$74,999	71.41%	586
	\$75,000 - \$99,999	69.73%	390
	\$100,000 or more	72.49%	713
By Gender:	Female	67.62%	1,445
	Male	71.29%	1,272
By Sexual Orientation:	Straight	67.72%	2,349
	Bisexual	80.87%	285
By Political Ideology:	Very Liberal	76.87%	527
	Liberal	71.13%	1,155
	Moderate	63.35%	772
	Conservative	59.51%	199
	Very Conservative	69.42%	35
By Political Party:	Republican	65.80%	243
	Democrat	68.98%	1,714
	Independent	69.61%	452
	Something Else	74.01%	279

**Table 10. What about ranking your top three choices
for the Board of Supervisors? Was that... (Q14)**

Percent of Ease of Ranking Top Three Candidates		Percent Easy	Percent Neither Easy nor Difficult	Percent Difficult	Sample N
Total Sample (all voters surveyed):		50.19%	29.98%	19.78%	2,608
By Race/Ethnicity:	Hispanic/Latino	56.71%	28.63%	14.66%	261
	Asian/PI	47.90%	33.76%	18.34%	341
	African American/Black	55.80%	29.05%	15.14%	136
	White	49.29%	29.05%	21.66%	1,671
	American Indian	63.89%	5.22%	30.89%	12
	Other	43.95%	40.91%	15.14%	124
	Multiple Answers	61.36%	24.28%	14.35%	33
By First Language:	English	50.10%	29.76%	20.14%	2,149
	Chinese	43.96%	37.49%	18.54%	114
	Spanish	60.32%	23.79%	15.89%	141
	Other	47.76%	32.44%	19.80%	156
By District:	District 1	54.44%	28.23%	17.33%	356
	District 2	39.52%	34.91%	25.56%	379
	District 3	49.53%	30.30%	20.17%	375
	District 5	47.07%	29.53%	23.39%	443
	District 7	56.57%	23.07%	20.36%	337
	District 9	64.70%	29.38%	15.92%	382
	District 11	51.03%	34.23%	14.74%	335
By Income:	Less than \$10,000	41.47%	40.49%	18.04%	159
	\$10,000 - \$19,999	54.30%	30.06%	15.56%	170
	\$20,000 - \$49,999	49.88%	31.41%	18.71%	658
	\$50,000 - \$74,999	50.67%	32.32%	17.00%	545
	\$75,000 - \$99,999	46.88%	26.24%	26.87%	359
	\$100,000 or more	52.68%	26.31%	21.01%	640
By Gender:	Female	48.95%	29.80%	21.25%	1,370
	Male	51.62%	30.07%	18.32%	1,198
By Sexual Orientation:	Straight	49.79%	30.20%	20.00%	2,210
	G/L/Bi	53.66%	27.72%	18.62%	281
By Political Ideology:	Very Liberal	56.25%	26.01%	17.74%	508
	Liberal	47.53%	30.60%	21.86%	1,087
	Moderate	50.09%	30.19%	19.73%	728
	Conservative	53.73%	33.40%	12.87%	187
	Very Conservative	35.59%	30.91%	33.50%	32
By Political Party:	Republican	56.46%	27.68%	15.86%	224
	Democrat	49.26%	30.13%	20.62%	1,626
	Independent	51.02%	29.62%	19.36%	428
	Something Else	49.81%	31.43%	18.76%	266

Table 11. When you first filled out your ballot for the Board of Supervisors, did you...(Q15)

Percent of Number of Candidates Ranked		Ranked Three	Ranked Two	Voted for Only One	Some-thing Else	Sample N
Total Sample (all voters surveyed):		59.0%	14.3%	22.8%	3.9%	2,597
By Race/Ethnicity:	Hispanic/Latino	53.33%	15.95%	27.39%	3.33%	259
	Asian/PI	58.02%	12.44%	26.19%	3.35%	344
	African American/Black	49.58%	17.68%	26.05%	6.69%	131
	White	61.86%	13.52%	20.89%	3.73%	1,671
	American Indian	25.16%	22.87%	41.60%	10.37%	12
	Other	50.20%	21.11%	23.56%	5.13%	119
	Multiple Answers	54.69%	18.18%	23.05%	4.09%	4,032
By First Language:	English	59.98%	14.88%	21.32%	3.83%	2,140
	Chinese	50.67%	12.15%	34.35%	2.83%	116
	Spanish	54.77%	7.86%	32.08%	5.30%	139
	Other	55.41%	12.29%	28.03%	4.27%	154
By District:	District 1	59.94%	16.36%	21.07%	2.63%	358
	District 2	46.04%	13.29%	34.76%	5.91%	378
	District 3	50.94%	12.37%	32.55%	4.15%	372
	District 5	76.16%	9.97%	10.17%	3.69%	441
	District 7	66.76%	13.82%	17.88%	1.54%	339
	District 9	55.50%	22.48%	16.00%	6.02%	378
	District 11	55.01%	12.51%	29.35%	3.13%	331
By Income:	Less than \$10,000	53.78%	15.23%	25.68%	5.31%	154
	\$10,000 - \$19,999	56.00%	13.46%	23.49%	7.05%	171
	\$20,000 - \$49,999	59.70%	15.24%	22.30%	2.77%	657
	\$50,000 - \$74,999	60.07%	13.82%	20.89%	5.22%	544
	\$75,000 - \$99,999	59.33%	14.33%	23.65%	2.69%	359
	\$100,000 or more	61.34%	13.88%	21.59%	3.19%	633
By Gender:	Female	58.91%	14.93%	22.75%	3.41%	1,366
	Male	59.42%	13.65%	22.51%	4.41%	1,195
By Sexual Orientation:	Straight	59.26%	14.38%	22.38%	3.99%	2,203
	G/L/Bi	58.58%	16.67%	21.83%	2.92%	280
By Political Ideology:	Very Liberal	58.51%	15.96%	21.55%	3.98%	513
	Liberal	60.84%	15.08%	20.41%	3.67%	1088
	Moderate	58.65%	12.98%	24.34%	4.03%	718
	Conservative	53.97%	11.05%	30.71%	4.28%	184
	Very Conservative	57.49%	10.35%	28.25%	3.90%	32
By Political Party:	Republican	61.61%	12.27%	23.74%	2.37%	225
	Democrat	58.93%	14.34%	23.02%	3.71%	1,623
	Independent	60.86%	13.94%	20.28%	4.92%	424
	Something Else	57.77%	16.30%	21.34%	4.59%	263

**Table 12. Overall, how would you describe your experience with
Ranked-Choice Voting for the BOS? (Q18)**

Percent Understanding RCV		Under- stood it Perfectly Well	Under- stood it Fairly Well	Did Not Understand it Entirely	Did Not Under- stand it at all	Sample N
Total Sample (all voters surveyed):		51.64%	34.80%	10.94%	2.63%	2,555
By Race/Ethnicity:	Hispanic/Latino	44.44%	36.05%	15.55%	3.96%	261
	Asian/PI	42.62%	44.02%	10.72%	2.65%	337
	African American/Black	39.46%	37.30%	15.62%	7.62%	129
	White	55.53%	32.82%	9.80%	1.85%	1,673
	American Indian	47.15%	25.47%	16.39%	10.99%	12
	Other	51.56%	32.57%	11.47%	4.41%	116
	Multiple Answers	53.50%	31.96%	12.10%	2.44%	28
By First Language:	English	53.97%	33.62%	9.87%	2.54%	2,135
	Chinese	34.80%	49.72%	11.40%	4.09%	109
	Spanish	40.58%	36.41%	18.37%	4.63%	140
	Other	45.05%	34.10%	18.58%	2.27%	154
By District:	District 1	51.70%	37.97%	9.09%	1.24%	355
	District 2	44.55%	39.59%	13.41%	2.46%	384
	District 3	53.58%	30.57%	13.31%	2.54%	373
	District 5	55.77%	33.74%	8.41%	2.11%	435
	District 7	54.09%	33.83%	8.84%	3.23%	334
	District 9	55.95%	30.14%	9.67%	4.24%	379
	District 11	44.58%	38.69%	13.63%	3.10%	323
By Income:	Less than \$10,000	42.19%	36.97%	16.12%	4.72%	153
	\$10,000 - \$19,999	45.65%	39.17%	10.52%	4.66%	168
	\$20,000 - \$49,999	51.88%	35.04%	10.22%	2.86%	654
	\$50,000 - \$74,999	52.72%	35.16%	9.43%	2.70%	539
	\$75,000 - \$99,999	52.90%	33.50%	11.26%	2.34%	360
	\$100,000 or more	53.76%	33.99%	10.43%	1.82%	633
By Gender:	Female	50.51%	35.28%	11.95%	2.26%	1,362
	Male	52.77%	34.64%	9.47%	3.12%	1,189
By Sexual Orientation:	Straight	50.89%	35.27%	11.30%	2.54%	2,200
	G/L/Bi	57.29%	33.38%	6.27%	3.06%	276
By Political Ideology:	Very Liberal	58.99%	31.34%	7.21%	2.46%	507
	Liberal	52.30%	33.66%	12.43%	1.61%	1,085
	Moderate	47.66%	38.56%	10.04%	3.75%	718
	Conservative	43.55%	39.58%	12.55%	4.32%	187
	Very Conservative	60.14%	21.59%	15.00%	3.27%	32
By Political Party:	Republican	54.71%	32.98%	9.25%	3.07%	223
	Democrat	48.90%	35.99%	12.55%	2.55%	1,621
	Independent	52.91%	38.05%	6.62%	2.42%	421
	Something Else	62.08%	25.42%	8.84%	3.67%	261

Table 13. Compared to past elections for the BOS, how much information did you gather about candidates before voting today? (Q19)

Percent of Amount of Information Gathered		More Than in Past Elections	No Difference	Less Than in Past Elections	First Time Voting	Sample N
Total Sample (all voters surveyed):		31.8%	52.3%	7.5%	8.3%	2,506
By Race/Ethnicity:	Hispanic/Latino	39.97%	40.79%	7.12%	12.12%	251
	Asian/PI	28.23%	56.38%	3.69%	11.54%	333
	African American/Black	34.55%	45.82%	11.44%	8.18%	125
	White	30.53%	54.23%	7.95%	7.29%	1,644
	American Indian	43.33%	19.94%	36.73%	.00%	12
	Other	37.54%	49.20%	5.74%	7.52%	115
	Multiple Answers	31.68%	53.62%	9.83%	4.87%	27
By First Language:	English	31.11%	53.33%	7.64%	7.92%	2,088
	Chinese	31.83%	58.29%	.66%	9.22%	111
	Spanish	42.06%	37.77%	8.97%	11.20%	138
	Other	30.85%	49.74%	8.26%	11.15%	151
By District:	District 1	33.53%	51.70%	7.17%	7.60%	354
	District 2	23.59%	60.16%	6.80%	9.44%	371
	District 3	24.50%	56.19%	8.23%	11.08%	363
	District 5	33.62%	49.18%	8.91%	8.29%	428
	District 7	34.87%	52.23%	6.49%	6.40%	332
	District 9	35.05%	48.43%	8.92%	7.60%	370
	District 11	38.51%	49.37%	4.97%	7.16%	317
By Income:	Less than \$10,000	30.2%	45.6%	6.0%	18.1%	149
	\$10,000 - \$19,999	40.6%	41.3%	11.3%	6.9%	160
	\$20,000 - \$49,999	33.1%	49.4%	6.8%	10.7%	634
	\$50,000 - \$74,999	29.3%	57.3%	4.9%	8.5%	529
	\$75,000 - \$99,999	32.5%	52.0%	9.3%	6.2%	354
	\$100,000 or more	31.2%	56.0%	8.1%	4.8%	629
By Gender:	Female	30.8%	52.7%	8.2%	8.3%	1336
	Male	32.8%	52.3%	6.5%	8.4%	1171
By Sexual Orientation:		%	%	%	%	
	Straight	32.3%	51.5%	7.6%	8.6%	2161
	G/L/Bi	29.3%	58.6%	5.5%	6.6%	273
By Political Ideology:	Very Liberal	34.5%	51.7%	7.2%	6.6%	501
	Liberal	28.7%	54.8%	8.7%	7.8%	1067
	Moderate	33.0%	51.1%	5.7%	10.2%	706
	Conservative	33.3%	49.7%	8.5%	8.5%	177
	Very Conservative	48.5%	33.3%	3.0%	15.2%	33
By Political Party:	Republican	31.9%	52.1%	8.0%	8.0%	213
	Democrat	31.1%	53.4%	7.7%	7.8%	1600
	Independent	36.8%	46.6%	8.2%	8.4%	416
	Something Else	29.5%	54.3%	4.7%	11.6%	258

Table 14. Compared to past elections for the BOS, were you more or less likely to vote for your most preferred candidate today? (Q20)

Percent of Likelihood to Vote for Preferred Candidate		More Likely	No Difference	Less Likely	Sample N
Total Sample (all voters surveyed):		46.19%	50.87%	2.94%	2,376
By Race/Ethnicity:	Hispanic/Latino	59.74%	33.93%	6.32%	238
	Asian/PI	49.00%	49.20%	1.81%	307
	African American/Black	50.49%	41.45%	8.06%	124
	White	43.18%	54.75%	2.07%	1,559
	American Indian	42.07%	39.52%	18.41%	11
	Other	47.42%	48.70%	3.88%	111
	Multiple Answers	46.19%	50.87%	2.94%	27
By First Language:	English	45.41%	51.63%	2.96%	1,981
	Chinese	44.58%	54.81%	0.61%	105
	Spanish	60.61%	33.73%	5.66%	132
	Other	46.20%	52.32%	1.48%	138
By District:	District 1	47.27%	51.19%	1.54%	336
	District 2	38.84%	57.61%	3.55%	340
	District 3	40.06%	57.50%	2.44%	338
	District 5	51.46%	45.65%	2.90%	398
	District 7	44.70%	53.50%	1.80%	323
	District 9	49.36%	44.78%	5.85%	358
	District 11	49.92%	47.82%	2.26%	2,402
By Income:	Less than \$10,000	44.83%	51.05%	4.12%	128
	\$10,000 - \$19,999	47.80%	43.17%	9.03%	154
	\$20,000 - \$49,999	49.71%	47.23%	3.07%	600
	\$50,000 - \$74,999	45.46%	51.99%	2.55%	504
	\$75,000 - \$99,999	43.15%	53.22%	3.63%	334
	\$100,000 or more	45.24%	53.82%	0.94%	604
By Gender:	Female	47.11%	50.27%	2.62%	1,268
	Male	45.20%	51.53%	3.27%	1,109
By Sexual Orientation:	Straight	47.03%	50.34%	2.63%	2,044
	G/L/Bi	43.38%	51.56%	5.06%	263
By Political Ideology:	Very Liberal	50.09%	46.66%	3.25%	475
	Liberal	42.83%	55.52%	1.65%	1008
	Moderate	47.49%	48.70%	3.81%	669
	Conservative	51.32%	44.87%	3.81%	171
	Very Conservative	49.59%	40.98%	9.43%	32
By Political Party:	Republican	44.85%	49.94%	5.21%	200
	Democrat	44.92%	52.41%	2.67%	1525
	Independent	51.74%	45.40%	2.87%	392
	Something Else	46.63%	50.41%	2.96%	238

**Table 15. Sometimes voters feel like their vote is wasted, or doesn't count for much in an election.
What about you? Compared to past elections for the BOS, which best describes you? (Q21)**

Percent of Feeling Like Vote Was Wasted		More Like Vote Was Wasted	No Difference	Less Like Vote Was Wasted	Sample N
Total Sample (all voters surveyed):		6.8%	64.2%	29.0	2,373
By Race/Ethnicity:					
	Hispanic/Latino	8.4%	63.7%	27.9%	236
	Asian/PI	6.1%	66.5%	27.4%	306
	African American/Black	10.6%	63.5%	25.9%	124
	White	6.0%	64.6%	29.4%	1,561
	American Indian	28.9%	46.4%	24.8%	11
	Other	6.9%	58.5%	34.6%	107
	Multiple Answers	20.4%	51.9%	27.7%	28
By First Language:					
	English	6.8%	63.8%	29.4%	1,982
	Chinese	2.9%	70.2%	26.9%	105
	Spanish	9.0%	56.2%	34.8%	130
	Other	5.9%	68.4%	25.7%	135
By District:					
	District 1	6.3%	62.4%	31.3%	337
	District 2	7.3%	68.8%	23.9%	340
	District 3	5.0%	69.1%	25.9%	338
	District 5	7.7%	59.5%	32.8%	403
	District 7	8.5%	63.2%	28.3%	317
	District 9	4.6%	60.3%	35.1%	356
	District 11	8.0%	67.3%	24.7%	308
By Income:					
	Less than \$10,000	7.6%	65.5%	26.9%	127
	\$10,000 - \$19,999	7.5%	62.0%	30.5%	153
	\$20,000 - \$49,999	8.8%	60.5%	30.7%	596
	\$50,000 - \$74,999	6.2%	65.2%	28.6%	506
	\$75,000 - \$99,999	4.3%	65.5%	30.2%	334
	\$100,000 or more	6.4%	66.2%	27.4%	605
By Gender:					
	Female	6.3%	65.8%	27.9%	1,266
	Male	7.3%	62.3%	30.5%	1,113
By Sexual Orientation:					
	Straight	6.6%	65.2%	28.1%	2,045
	G/L/Bi	6.9%	56.0%	37.1%	263
By Political Ideology:					
	Very Liberal	5.7%	58.4%	35.9%	474
	Liberal	5.4%	66.7%	27.9%	1,014
	Moderate	7.9%	66.4%	25.7%	666
	Conservative	14.4%	57.1%	28.4%	171
	Very Conservative	4.4%	57.5%	38.1	32
By Political Party:					
	Republican	12.3%	62.2%	25.5%	202
	Democrat	5.6%	65.9%	28.5%	1,522
	Independent	8.6%	59.6%	31.7%	393
	Something Else	5.0%	62.2%	32.8%	239

**Table 16. Thinking just about the campaign for the BOS in your district,
was it more or less negative than in past elections? (Q22)**

Percent of Campaign Negativity		More Negative	No Difference	Less Negative	Sample N
Total Sample (all voters surveyed):		14.2%	70.7%	15.1%	2,528
By Race/Ethnicity:	Hispanic/Latino	11.6%	73.2%	15.2%	243
	Asian/PI	12.8%	71.1%	16.1%	341
	African American/Black	18.2%	65.4%	16.4%	138
	White	14.8%	70.5%	14.7%	1,652
	American Indian	19.7%	63.2%	17.1%	12
	Other	8.0%	78.4%	13.6%	116
	Multiple Answers	19.1%	58.0%	22.9%	28
By First Language:	English	14.0%	71.0%	15.0%	2,128
	Chinese	14.2%	70.2%	15.6%	112
	Spanish	13.1%	69.4%	17.5%	127
	Other	14.0%	69.6%	16.3%	141
By District:	District 1	32.5%	57.0%	10.5%	348
	District 2	6.7%	81.0%	12.3%	392
	District 3	16.3%	72.1%	11.6%	378
	District 5	6.5%	72.0%	21.5%	425
	District 7	9.5%	74.7%	15.8%	337
	District 9	7.9%	71.5%	20.6%	350
	District 11	23.4%	64.1%	12.5%	323
By Income:	Less than \$10,000	10.6%	77.8%	11.6%	148
	\$10,000 - \$19,999	19.0%	64.9%	16.1%	160
	\$20,000 - \$49,999	12.1%	70.0%	17.9%	626
	\$50,000 - \$74,999	13.1%	70.8%	16.1%	531
	\$75,000 - \$99,999	16.5%	67.6%	15.9%	362
	\$100,000 or more	14.5%	73.2%	12.3%	647
By Gender:	Female	15.0%	69.9%	15.1%	1,334
	Male	13.4%	71.2%	15.4%	1,199
By Sexual Orientation:	Straight	13.9%	71.0%	15.1%	2,199
	G/L/Bi	13.8%	68.1%	18.1%	264
By Political Ideology:	Very Liberal	18.0%	63.4%	18.6%	487
	Liberal	12.9%	73.6%	13.5%	1,079
	Moderate	14.1%	71.4%	14.4%	723
	Conservative	13.1%	70.0%	16.9%	188
	Very Conservative	14.3%	65.2%	20.5%	33
By Political Party:	Republican	17.9%	68.7%	13.4%	229
	Democrat	14.2%	70.9%	15.0%	1,605
	Independent	14.7%	69.2%	16.1%	418
	Something Else	11.0%	70.8%	18.3%	259

Table 17. With the Ranked-Choice Voting system (Instant Runoff), there will be no runoff held in December. Which would you say describes you best? (Q23)

Percent of Preference for Runoff or RCV System	Prefer RCV	No Difference	Prefer Runoff	Sample N
Total Sample (all voters surveyed):	60.7%	26.6%	12.7%	2,594
By Race/Ethnicity:				
Hispanic/Latino	51.2%	33.2%	15.6%	254
Asian/PI	59.5%	26.9%	13.7%	343
African American/Black	39.8%	39.4%	20.8%	138
White	63.8%	24.4%	11.8%	1,701
American Indian	23.1%	56.3%	20.6%	12
Other	66.7%	25.3%	7.9%	117
Multiple Answers	70.6%	24.3%	5.2%	29
By First Language:				
English	61.4%	26.2%	12.4%	2,185
Chinese	66.6%	16.5%	16.9%	109
Spanish	50.3%	34.6%	15.0%	134
Other	60.2%	26.4%	13.4%	145
By District:				
District 1	53.7%	29.0%	17.3%	357
District 2	58.3%	30.8%	10.9%	399
District 3	62.3%	25.8%	12.0%	386
District 5	63.1%	23.8%	13.1%	443
District 7	65.8%	22.6%	11.5%	338
District 9	64.0%	26.4%	9.6%	371
District 11	55.6%	28.2%	16.2%	327
By Income:				
Less than \$10,000	44.1%	42.6%	13.3%	161
\$10,000 - \$19,999	49.7%	36.7%	13.5%	164
\$20,000 - \$49,999	59.4%	28.9%	11.7%	650
\$50,000 - \$74,999	61.0%	27.4%	11.6%	538
\$75,000 - \$99,999	60.1%	25.6%	14.3%	372
\$100,000 or more	68.3%	18.6%	13.1%	657
By Gender:				
Female	61.6%	27.2%	11.3%	1,368
Male	59.5%	26.0%	14.5%	1,233
By Sexual Orientation:				
Straight	60.5%	27.0%	12.5%	2,248
G/L/Bi	66.2%	21.2%	12.6%	279
By Political Ideology:				
Very Liberal	67.0%	22.5%	10.5%	501
Liberal	60.8%	26.5%	12.7%	1,111
Moderate	60.8%	26.5%	12.7%	745
Conservative	49.8%	34.3%	15.9%	188
Very Conservative	33.5%	41.4%	25.1%	35
By Political Party:				
Republican	55.7%	29.2%	15.1%	230
Democrat	61.4%	25.4%	13.1%	1,644
Independent	64.4%	26.4%	9.3%	434
Something Else	54.9%	31.6%	13.5%	267