

An Assessment of
Ranked-Choice Voting in the San
Francisco 2005 Election

Final Report

July 2006

Francis Neely
Assistant Professor of Political Science

Corey Cook
Assistant Professor of Political Science

Lisel Blash
Senior Researcher, Public Research Institute

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	ii
INTRODUCTION.....	1
METHODOLOGY.....	2
FINDINGS.....	6
AWARENESS OF RCV.....	6
OVERALL UNDERSTANDING OF RCV.....	10
RANKING CANDIDATES.....	16
OPINIONS ABOUT RCV.....	24
SUMMARY.....	35
APPENDIX A (SURVEY QUESTIONNAIRE).....	38
APPENDIX B (FREQUENCY TABLES).....	40
APPENDIX C (BIVARIATE TABLES).....	49

EXECUTIVE SUMMARY

Purpose

In the general election of November, 2005, the City and County of San Francisco used an Instant-Runoff Voting system, called Ranked-Choice Voting (RCV), for the second time. It was the first citywide application of RCV. Voters in four Board of Supervisors districts used it for the first time while those in the other seven used it for the second time. The purpose of this report is to evaluate the transition from the former runoff system to RCV. We surveyed 1923 voters to better understand their experience. This assessment considers four main indicators:

- Whether voters knew they would be asked to rank their preferences before coming to the polls or casting their absentee ballots,
- Whether voters reported understanding Ranked-Choice Voting after having used it,
- Whether voters tended to rank three candidates, and if not then why not, and
- What voters thought about RCV—whether they prefer it to the former runoff system, and which system they think produces more fair results.

Methodology

- Voters were surveyed in two ways: an exit poll of polling place voters (n = 1291) and a mail-in survey of absentee voters (n = 632).
- A purposive sample design was used in the exit poll: 26 precincts were chosen by how well they represented their BOS district, and 3 precincts were polled to oversample Asian-Americans, Latinos, and African-Americans. In the survey of absentee voters, respondents were chosen at random from official records.
- Response rates at the precincts ranged from 25% to 69%; the mail-in survey response rate was 18%.
- Survey forms were made available in English, Spanish and Chinese.

Prior Knowledge of Ranked-Choice Voting (RCV)

- A narrow majority of voters surveyed (54%) knew before voting that they would be asked to rank candidates for City Treasurer and Assessor in the 2005 election.
- The proportion of voters who had prior knowledge of RCV was lower in 2005 (54%) than in the 2004 election for the Board of Supervisors (67%).
- Those with lower rates of prior knowledge tended to be those who were less educated, reported having lower incomes, and spoke a primary language other than Spanish.
- African Americans were considerably less likely than other racial and ethnic groups (41.9%) to know they would be ranking their choices for these offices.
- Voters residing in districts that used RCV for the 2004 election for the Board of Supervisors were more likely to know that they would be ranking their choices in 2005 (57%) than those from districts using RCV for the first time (49%).

Overall Understanding of RCV

- The wide majority of voters said that they understood Ranked-Choice Voting either “fairly well” or “perfectly well” (87%).
- The proportion of voters indicating they understood RCV in 2005 (87%) is about the same as those saying they understood RCV in the 2004 Board of Supervisors election (86%).
- Self-reported levels of understanding were lowest among voters with low levels of education and those for whom Chinese was their first language.

Use of the Ranked Choice Ballot

- The majority of voters reported ranking three candidates in the race for City Treasurer (57%), while 33% reported selecting only one candidate.
- Few systematic differences were found between demographic groups, however African Americans were far more likely to rank three choices (73%) than Whites (51%) and the lowest proportions were found among the oldest voters (38%) and those with both the lowest and highest levels of education (44% and 50%, respectively).
- The primary reasons voters gave for ranking less than three choices was that they felt they did not have enough information about other candidates (31%) or they found other candidates to be unacceptable to them (21%).
- A small proportion of voters (9%) reported selecting less than three candidates in the Treasurer race because they did not know they could do so or did not understand that part of the ballot.
- By a wide margin, more voters said the ranking task easy or very easy (46%) than said it was difficult or very difficult (16%).

Opinions of RCV

- By a margin of three to one, voters preferred the ranked-choice voting system to the prior two-stage runoff election system: 51% preferred RCV; 17% preferred the traditional runoff method, while the remainder expressed no preference.
- Younger voters, those whose first language was English, and those with more education and income were more likely to voice a preference for RCV.
- Among racial and ethnic groups, African Americans (32%) were by far the least likely to say that they preferred ranked-choice voting.
- By a margin of greater than two to one (37% to 15%), voters perceived the Ranked-Choice Voting system as more fair than the runoff system. However, a plurality of those surveyed said there was no difference between the two.
- Older voters and self-reported conservatives were the least likely to perceive RCV as more fair than the runoff system.

INTRODUCTION

This report contains results of a survey of voters in the San Francisco municipal election of November, 2005. In that election, the City and County of San Francisco used an Instant-Runoff Voting system, called Ranked-Choice Voting (RCV), for the second time. It was the first citywide application of RCV. Voters in four Board of Supervisors districts used it for the first time while those in the other seven used it for the second time. Candidates for City Assessor and Treasurer were elected using this method of voting. The election for the City Attorney did not use RCV since the incumbent ran unopposed.

San Francisco is the first jurisdiction in the U.S. to elect government offices with this type of election system since Ann Arbor, Michigan used it in the 1970s. Other jurisdictions are considering adopting similar election reform, or have already begun to implement Instant-Runoff Voting systems. Therefore, it is useful to track the experience of San Francisco and to examine the outcome of this historic electoral reform.

The primary purpose of this study is to gauge the ease or difficulty with which voters expressed their preferences on this form of ballot and to get their reactions after having used the RCV system. This study follows a similar survey taken during the November 2004 election for seven members to the Board of Supervisors. We consider four main indicators: (1) Whether voters knew in advance that they would be permitted to rank their preferences in these races before coming to the polls or casting their absentee ballot; (2) Whether voters reported understanding the ranked-choice process after having used it; (3) Whether voters fully utilized the preference rankings, why they did not for those voters who ranked less than three choices, and whether they found that ranking task to be difficult or easy; and (4) Once having used the ranked-choice system, whether voters perceive Ranked-Choice Voting to be fair and prefer that voting system to the previously used two-stage runoff election.

We examine these questions in part by exploring differences between demographic groups that might have experienced relatively higher levels of difficulty with the unfamiliar ballot. Those include groups based on language, race and ethnicity, age, education, and income.

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 (PRI) at SFSU managed the study in the field and contributed throughout the project. PRI's John Rogers and Jim Wiley also provided valuable support and suggestions. In addition, Richard DeLeon, professor emeritus of political science at SFSU, gave advice on the design and implementation, and provided 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 by the College of Behavioral and Social Sciences and the Office of Community Service Learning at San Francisco State University.

METHODOLOGY

Study Design

Voters were surveyed to obtain measures of public opinion on the questions mentioned above. The goal was to draw inferences to all voters—those who fill out and cast ballots at the polling places on Election Day and those who vote with an absentee ballot submitted through the mail.¹

Sample Design

Exit Poll Sample: A purposive sample design was used. The basic sample includes two or three precincts per district, twenty-six precincts in all, chosen for how well they represent their district. Two steps were taken to identify representative precincts. First, from census data an index was built from ten demographic indicators (race and ethnicity, income, home ownership, households with children, nativity, age, and education). The indicators were standardized and deviations were calculated and summed to create an aggregate measure of typicality. The second step 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. Richard DeLeon’s Progressive Voting Index is a measure of progressivism based on past voting records. Deviations from the district average were calculated and plotted against the demographic index of deviation. A low score on both of these indices means that a precinct is very much like the district overall in its demographic makeup and in its ideology. These were the precincts chosen for the survey of polling place voters, ranked below by how well they reflect the nature of their district.

Table 1. Precincts in the Exit Poll Sample

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11
Basic Sample	2111	3217	3324	2447	3513	3617	2725	3851	3921	3024	1101
	2103	2212	3322	2423	3548	3611	2724	3846	3931	3025	1105
		3218	3341		3526			3847			
Over-sample			3336		3522				3918		

Cell entries are precinct numbers. D1 = Board of Supervisor District 1.

In addition to the basic sample, three groups were oversampled: Asian-Americans, Latinos, and African-Americans. To do this, three additional precincts were chosen using 2000 census data to identify precincts with high concentrations of residents from each group. Precinct 3336 contains 92% Asian/Pacific Islanders; precinct 3522 has 66% African-American/Black residents; and precinct 3918 is made up of 77% Latinos. Those three precincts were surveyed, and the results from voters in each group were added to the basic sample. Oversampling allows more accurate estimates to be made about subgroups within populations.

Absentee Voters Sample: The sample of absentee voters was generated from the Department of Election registration files, obtained through their office. A random 3600 records were chosen that contained the names and addresses of voters in San Francisco who are under a permanent

¹ Note that this study excludes a small proportion of voters who cast ballots early at City Hall.

absentee status. Surveys were mailed to those voters, along with pre-addressed and postage-paid return envelopes. Approximately seven days later a follow-up postcard reminder was sent.

The Instrument

The questionnaire was designed to pursue the main research questions mentioned above: How easy or difficult was it for voters to use the RCV system? And what did they think of it, after having used it? We see these as fundamental questions in assessing the success of implementing a new election system.

Those issues were examined in four main questions: (1) Did voters know about RCV before voting? (2) How easy or difficult it was for them to use RCV? (3) How many candidates did people tend to rank? (4) How did voters compare RCV to the former runoff system? Measures were included that would allow us to examine voters' experience among various groups, especially those based on education, income, language, and race or ethnicity.

The survey was relatively brief, fitting on one piece of legal-sized paper, printed on both sides. It was translated into Spanish and Chinese (See the Appendix for the English version). The absentee version was also available in three languages. 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 seventh 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)?"

Surveying Voters

Exit Poll of Polling Place Voters: We recruited 115 volunteer interviewers from political science and urban studies 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 three-hour training session conducted by Lisel Blash and professors Neely or Cook. The students received credit toward various courses for their efforts.

Interviewers worked in pairs and surveyed voters in six hour shifts.² 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 1:00 p.m. to 7:00 p.m. shift. Because of known interviewer effects, nearly all of the pairs included one female and one male.

Voters who completed the survey did so unassisted, and then folded and placed their forms in a box in order to preserve anonymity. The interviewers asked each person leaving the polling place 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.

² Several of the interviewer teams included a third person.

Response Rates

In the exit poll, among precincts that were staffed for the full day, the response rate ranged from 25% to 69% (number of voters completing the survey / total number of polling place voters). In the absentee mail-in survey, of the 3600 requests sent out 632 completed forms were returned, for a response rate of 18%.

The Data

In the polling place sample, the total number of completed surveys collected was 1291. The total number of completed absentee surveys was 632. The following tables display the number of completes per district.

Table 2. Exit Poll and Absentee Surveys Collected by District

BOS District	Number of Exit Poll Surveys	Number of Absentee Surveys
D1	104	47
D2	137	72
D3	142 ^a	46
D4	86	56
D5	184 ^b	56
D6	72	47
D7	97	75
D8	151	90
D9	146 ^c	37
D10	99	39
D11	73	34
Unknown ^d	0	33
Total	1291	632

a: 44 of the 142 are oversampled cases; b: 31 of the 184 are oversampled cases; c: 67 of the 146 are oversampled cases; d: 33 absentee surveys were returned with the precinct information removed.

Weighting the Data: The results reported below are from weighted data, based on three factors. First, in order to gauge the opinions of all voters in the election, the polling place and absentee data were combined. In doing so, the proportion of each type of voter in the data matters. Among the 1923 voters surveyed, 632 (32.87%) were absentee voters. This is somewhat smaller than the proportion of actual absentee votes cast during the election (40.41%).³ Weighting adjusts for this discrepancy. Second, the exit poll data were weighted to adjust for discrepancies between the proportion of completed surveys collected in a district and the polling place turnout in that district. These discrepancies arose because of differences in staffing and differences in response rates across the districts. Finally, in order to improve the estimates among subgroups of voters that are typically underrepresented in exit poll surveys, three precincts were over-sampled. Those were located in Chinatown, the Mission, and Western Addition. Once the over-sampled

³ The number of absentee and polling place voters was acquired from the Statement of the Vote, retrieved from the San Francisco Department of Elections web pages.

cases were added, the proportions of each group were adjusted within that district to match the original proportions in the basic sample. Weighting the data improves the accuracy of the report, although in this study the effect is minimal—the results from weighted and un-weighted data reported in the tables below typically vary by less than 2%.

FINDINGS

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

1. Did voters know about Ranked-Choice Voting before coming to vote?
2. Did they understand the ballot?
3. What was voters' experience with the ranking task: Was it easy? Did they rank three candidates? If not, then why not?
4. What do voters think of RCV?

Though we highlight what we see as the most relevant findings here, in the appendices we report the frequencies of responses to questions asked of polling place voters as well as bivariate reports on several key variables for further information.

We report the results on select variables whether the observed differences are statistically significant or not. Readers should be aware that a Chi-square test that produces a p value of less than .05 means that the differences observed in the sample are very likely to exist in the population; specifically, we are 95% certain that the differences among surveyed voters also exist among all voters.

1. Awareness of RCV Prior to Election Day

The San Francisco Department of Elections informed voters in a variety of ways about Ranked-Choice Voting and its use in the November, 2005 election. They conducted 241 separate outreach events, all of which included information about RCV. In addition to a citywide mailing to registered voters and paid advertisements in neighborhood newspapers, the department produced and distributed a multilingual brochure and audio and video public service announcements. To gauge voters' awareness of RCV respondents were asked, "Before coming to vote today, did you know you would be asked to rank your choices for the Treasurer and Assessor?" Just over one-half of the voters (54%) said that they knew they would be asked to rank their choices. This figure is quite a bit lower than the proportion of respondents who indicated during the November 2004 election that they were aware RCV would be used in elections for the Board of Supervisors (69%). However, it is encouraging that voters surveyed in those precincts that had previously voted in district elections for the Board of Supervisors using the ranked-choice ballot in 2004 were substantially more likely to know that the ranked-choice ballot would be used for Treasurer and Assessor in this election.

**Table 3. Prior Knowledge of RCV by District Type
(Chi-square = 12.01, $p < .001$, N = 1902)**

	"Yes-Knew"
Districts held 2004 BOS Election	57.3%
Districts did not hold 2004 BOS Election	49.2%

Differences in prior knowledge were observed across age groups, but not in any meaningful pattern. Further, those differences are not statistically significant.

Table 4. Prior Knowledge of RCV by Age
(Chi-square = 11.50, p < .12, N = 1894)

	“Yes-Knew”
18-24 years	51.8%
25-29 years	50.9%
30-39 years	54.9%
40-49 years	52.7%
50-59 years	50.9%
60-69 years	63.4%
70-79 years	56.8%
80 years & older	55.0%

Education, however, was strongly related to the likelihood that voters knew that they would be asked to rank candidates. Those with less than a high school education were less likely to know (43% knew), and voters with coursework beyond the BA/BS level were more likely to know (61%). These findings are consistent with those from the prior election.

Table 5. Prior Knowledge of RCV by Education
(Chi-square = 16.50, p < .003, N = 1876)

	“Yes-Knew”
Less than HS	43.4%
HS grad	53.2%
Some college	50.4%
College grad	52.2%
Post-grad study	60.6%

By a small margin, voters who learned Spanish as their first language were more likely than others (61% knew) to be aware that they would be asked to rank their choices for Treasurer and Assessor. However, when comparing all four groups, the differences are not statistically significant. Still, it is worth noting that this finding varies from the previous election. In 2004, native English (70%) and Chinese (69%) speakers were the most likely to report prior knowledge, while native Spanish speakers (56%) reported significantly lower levels of awareness.

**Table 6. Prior Knowledge of RCV by First Language
(Chi-square = 4.30, p < .24, N = 1874)**

	“Yes-Knew”
English	54.9%
Chinese	53.4%
Spanish	61.3%
Other	47.4%

Income was not systematically related to one’s likelihood of knowing about RCV before voting. As seen in Table 7, the largest difference is between the least wealthy voters who were least likely to know (49%) and those with \$75,000 to \$100,000 household incomes who were most likely (59%). But the pattern is not consistent and the differences could have occurred by chance.

**Table 7. Prior Knowledge of RCV by Income
Chi-square = 4.68, p < .46)**

	“Yes-Knew”
Less than \$10,000	49.0%
\$10,000 - \$19,999	55.9%
\$20,000 - \$49,999	53.7%
\$50,000 - \$74,999	52.4%
\$75,000 - \$99,999	59.3%
\$100,000 or more	54.1%

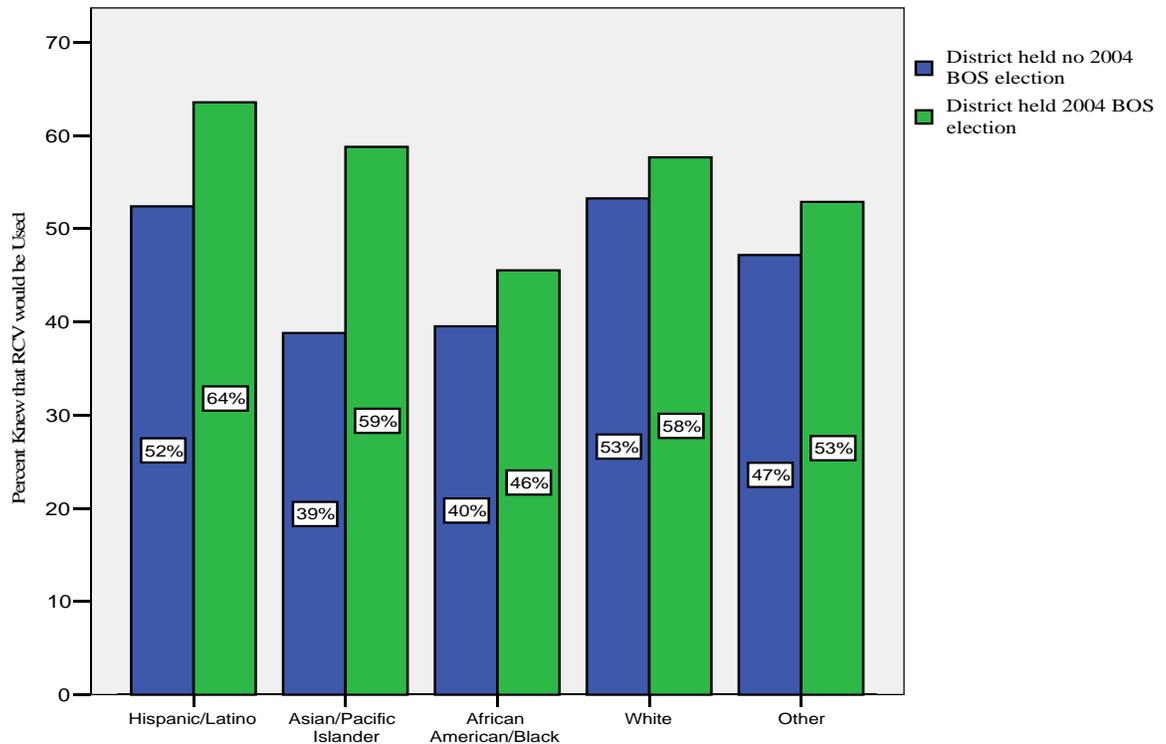
Across racial and ethnic groups, Latinos were most likely to have prior knowledge of RCV (59%) while African-Americans were least likely (42%). About 52% of Asians and Pacific Islanders knew they would be asked to rank candidates, as did 56% of whites, and 46% of those of “other” races and ethnicities.

**Table 8. Prior Knowledge of RCV by Race/Ethnicity
(Chi-square = 12.58, p < .02)**

	“Yes-Knew”
Hispanic/Latino	59.3%
Asian/PI	51.6%
African American/Black	41.9%
White	56.0%
Other	50.4%

However, for all ethnic and racial groups, respondents residing in districts with prior experience with the ranked-choice ballot reported higher levels of knowledge that the ballot would be used in the 2005 general election. This trend was particularly pronounced among Asian and Pacific Islanders. Among members of this group, rates of knowledge about RCV were 20 points higher in districts that had previously used ranked-choice balloting.

Figure 1: Relationship Between District Type, Race/Ethnicity, and Level of Understanding of RCV (n = 1875)



Within racial group comparisons across district differences: Chi-square Latino = 1.96, $p < .11$; Chi-square Asian = 10.34, $p < .001$; Chi-square Black = .42, $p < .32$; Chi-square White = 2.15, $p < .08$; Chi-square Other = .39, $p < .33$. Within district group comparisons across racial and ethnic groups: Chi-Square 2004 District = 5.40, $p < .25$; Chi-square Non-2004 District = 10.24, $p < .04$.

Summary

While most voters knew before they voted that they would be asked to rank the candidates for City Treasurer and Assessor/Recorder, nearly half did not. Voters with more education were more likely to have prior knowledge of RCV, as were voters who lived in districts that used RCV in the 2004 Board of Supervisors election. Black voters were less aware of RCV than others. Controlling for race and ethnicity, the influence of having had a 2004 RCV election was greatest among Asian-American voters. While levels of prior knowledge of RCV were not significantly different across language groups, it is worth noting that native Spanish speakers reported being relatively more aware of RCV in 2005 than in 2004.

2. Overall Understanding of Ranked-Choice Voting

Voters were asked to describe their overall experience with Ranked-Choice Voting by answering the following question: “Overall, how would you describe your experience with Ranked-Choice Voting for City Treasurer and/or Assessor-Recorder?” 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, or the method for transferring a vote from a first preference to a second preference. We selected a measure that would most cleanly gauge the degree to which voters were able to navigate the new system to express their preferences on the ballot.

Generally speaking, voters across all categories reported high levels of understanding. About 87% of those responding said that they understood it either perfectly well or fairly well. And slightly over one-half (52%) of voters said they understood it perfectly well. These figures tracked closely to the results from the previous election. By nearly identical proportions, a sizeable majority of voters in the 2004 election reported general understanding (86% to 14%). In the following tables we consider levels of understanding based on the same variables in the last section: age, education, first language, race/ethnicity, and income. To present the results more clearly, we collapse the two categories indicating a general understanding (“understood it perfectly well” or “understood it fairly well,” and the two that indicate some degree of not understanding (“did not understand it entirely” or “did not understand it at all”). Because the concern in changing election systems and voting procedures centers on voters who might have difficulty expressing their preferences, we report the proportions who indicated they did not understand RCV.

**Table 9. Overall Understanding of RCV
(N = 1633)**

Understood it perfectly well	51.6%
Understood it fairly well	35.6%
Did not understand it entirely	9.9%
Did not understand it at all	3.0%

As shown in Table 10, self-reported levels of understanding were higher in districts that held a previous election using RCV than those that did not, although the difference is at the margins of statistical significance.

**Table 10. Overall Understanding of RCV by District Type
(Chi-square 2.56, p<.11, N = 1633)**

	Did not understand entirely or did not understand at all
Districts held 2004 BOS Election	11.8%
Districts did not hold 2004 BOS Election	14.5%

No systematic differences in understanding were observed across age groups as shown in the below table. Although one group stands out—voters 80 years and older—as more likely to report not understanding, that difference is not significant when considered against the other age categories separately. When compared against all others combined, however, it is marginally significant (Chi-square = 3.21, p < .08).

**Table 11. Understanding of RCV by Age
(Chi-square = 5.30, p < .63, N = 1625)**

	Did not understand entirely or did not understand at all
18-24 years	13.3%
25-29 years	10.6%
30-39 years	11.4%
40-49 years	13.2%
50-59 years	13.8%
60-69 years	12.8%
70-79 years	10.4%
80 years & older	20.0%

Levels of education were related to levels of understanding. Nearly one-fourth (24%) of the voters in the least educated group indicated that they did not understand RCV, compared to only one-tenth (10%) of those with the most years of formal education. These proportions closely matched those observed in the 2004 election where by far the single largest percentage of those reporting a lack of understanding were those without a high school diploma (27%).

Table 12. Understanding of RCV by Education
(Chi-square = 9.69, p < .05, N = 1409)

	Did not understand entirely or did not understand at all
Less than HS	23.8%
HS grad	15.3%
Some college	13.9%
College grad	13.3%
Post-grad study	10.0%

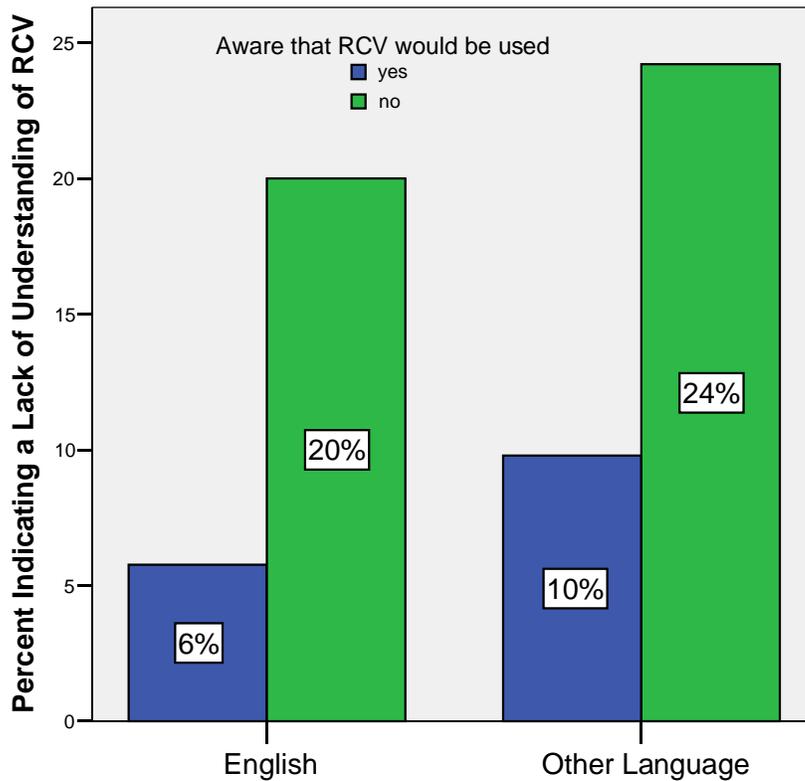
One’s understanding of RCV was also related to one’s first language. A higher proportion of voters who learned Chinese as their first language said they did not understand RCV (22%) than did voters who first learned Spanish (9%) or English (12%).

Table 13. Understanding of RCV by First Language
(Chi-square = 10.08, p < .02, N = 1610)

	Did not understand entirely or did not understand at all
English	12.1%
Chinese	21.9%
Spanish	9.0%
Other	13.9%

For both native and non-native English speakers, lack of understanding was substantially higher among voters who had been unaware that they would be asked to rank their choices for Assessor and Treasurer. Still, statistically significant differences remained between those whose first language is English and those whose first language is another language among those aware that RCV would be used in this election.

Figure 2. Relationship between First Language, Prior Knowledge, and Understanding of Ranked-Choice Voting (N = 1602)



Within language group comparisons across district differences: Chi-square English = 61.42, $p < .001$; Chi-square Not English = 11.20, $p < .001$. Within knowledge group comparisons across language groups: Chi-Square Prior Awareness = 3.00, $p < .08$; Chi-square No Prior Awareness = 1.15, $p < .28$.

Although some differences in levels of understanding were observed across racial and ethnic groups, those were not statistically significant. The proportions of voters who indicated they did not understand RCV ranged from 10% (Latinos) to 16% (African-Americans), a difference that could have occurred by chance.

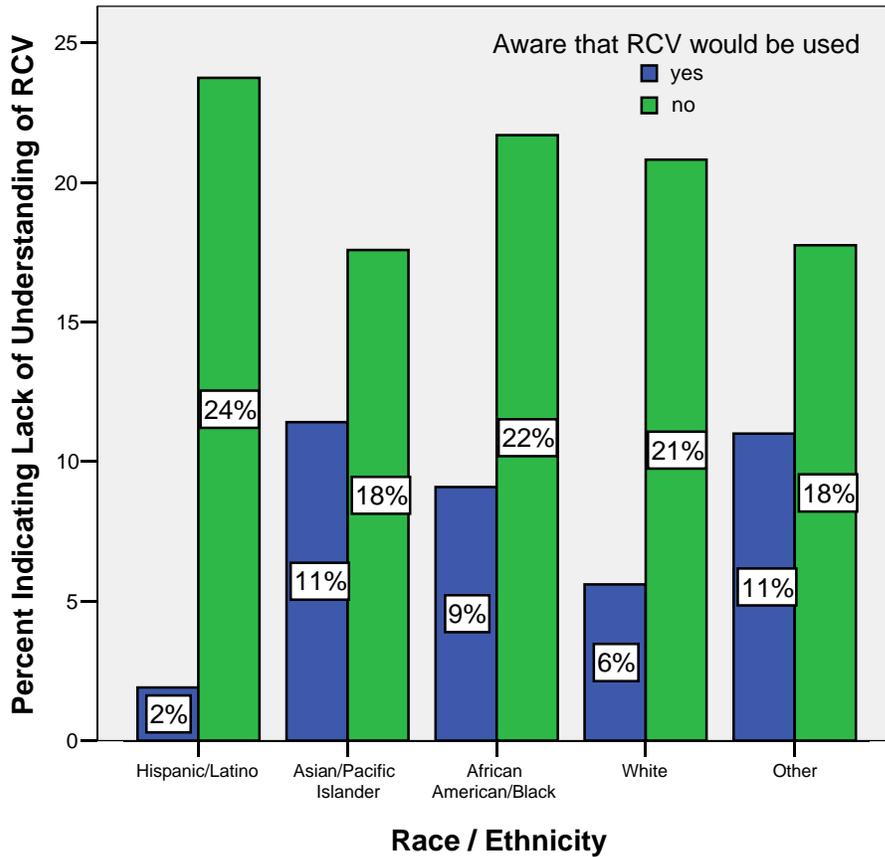
Table 14. Understanding of RCV by Race/Ethnicity (Chi-square = 3.23, $p < .52$, N = 1613)

	Did not understand entirely or did not understand at all
Hispanic/Latino	10.2%
Asian/PI	14.3%
African American/Black	16.2%
White	12.2%
Other	14.7%

Figure 3 displays the influence of prior knowledge on levels of understanding, across race and ethnic groups. By comparing the bars within each racial/ethnic group we see large differences in how well voters understood RCV based on whether they knew before voting that they would be asked to rank candidates. Prior knowledge tended to improve one's understanding of RCV, especially among Latino and white voters.

We can also examine the differences across racial and ethnic groups, among those who did and did not have prior knowledge of RCV. Differences among those who did not know they would be asked to rank candidates are indicated by comparing the lightly shaded bars, and they are not statistically significant. In other words, for voters who did not know about RCV, we observe no meaningful differences in levels of understanding across race and ethnic groups. However, among voters who did know (indicated by the darker bars) Latinos and whites reported significantly higher levels of understanding. It must be strongly emphasized, however, that all of these groups expressed overall high levels of understanding. Those saying they understood RCV the least were Latinos who did not have prior knowledge; yet a full three-fourths of them said they understood RCV "fairly well" or "perfectly well."

Figure 3. Relationship Between Ethnicity, Prior Knowledge, and Understanding of Ranked-Choice Voting (N = 1603)



Within racial group comparisons across district differences: Chi-square Latino = 15.75, $p < .001$; Chi-square Asian = 1.87, $p < .012$; Chi-square Black = 2.75, $p < .08$; Chi-square White = 53.88, $p < .001$; Chi-square Other = .85, $p < .26$ Within knowledge group comparisons across racial and ethnic groups: Chi-Square Prior Awareness = 10.34, $p < .04$; Chi-square No Prior Awareness = 1.29, $p < .86$

As expected, given findings for the previous year, income was correlated with levels of understanding, with the wealthiest voters least likely to say they did not understand the ranked choice balloting method. Approximately ten percent gave those responses. Meanwhile, about 23% of voters with household incomes of \$10,000 to \$20,000 indicated they did not understand entirely or did not understand at all.

**Table 15. Understanding of RCV by Income
(Chi-square = 16.55, p < .01, N = 1559)**

	Did not understand entirely or did not understand at all
Less than \$10,000	14.9%
\$10,000 - \$19,999	23.1%
\$20,000 - \$49,999	13.9%
\$50,000 - \$74,999	12.1%
\$75,000 - \$99,999	11.3%
\$100,000 or more	9.5%

Summary

Voters tended to say they understood RCV. Nearly nine in ten (87%) said they understood it fairly well or perfectly well. When examining the types of voters who understood it less than others, we find that those who are the least educated, whose first language was Chinese, and those with relatively low income (\$10,000 to \$20,000) were more likely to say they did not understand it. Voter eighty years old and older were also more likely to indicate they did not understand RCV, however that difference is not statistically significant. It is worth reiterating the positive nature of these findings. Across these various categories of voters, the single highest proportion of voters reporting a lack of understanding was less than one in four, with 24% of the least educated indicating they did not understand RCV. But that leaves over three-fourths of those in that income bracket who said that they did understand it.

3. Ranking Candidates

Respondents were asked about their votes for Treasurer. On the survey form we formatted three columns to resemble the actual ballot. Each column contained a full list of the candidates in the order they appeared on the ballot. Voters were asked, “How did you rank your preferences for City Treasurer? Put an “X” in the boxes below to show the choices you marked on the actual ballot. (If you didn’t vote for Treasurer, then go to question 26).”⁴

Of the respondents we surveyed, 71% filled out this section. Of those, nearly three in five (57%) ranked three candidates on the questionnaire, indicating that they had ranked three on the ballot. About one-third (33%) said they voted for only one candidate for Treasurer, while 10% said they ranked two candidates. In the following tables we report the proportions of voters ranking three candidates, among those who filled out this portion of the survey.

⁴ One of the candidates for Treasurer was mistakenly omitted from the list on the forms that were sent to absentee voters. Results reported on the number of candidates ranked and the follow-up questions about the reasons for ranking fewer than three (Q20 and Q21a-g) are therefore limited to polling place voters.

**Table 16. Number of Candidates Ranked
(N = 921)**

Chose one	33.1%
Ranked two	10.4%
Ranked three	56.5%

Although voters residing in those districts that had previously elected candidates for the Board of Supervisors were generally more knowledgeable about the use of RCV and reported higher levels of understanding about the task of ranking voters than those residing in other districts, they were no more likely than others to rank three candidates. The difference, about four percentage points, could have occurred by chance.

**Table 17. Voters Ranking Three Candidates by District Type
(Chi-square = 1.87, p < .40, N = 921)**

	Ranked three
Districts held 2004 BOS Election	54.9%
Districts did not hold 2004 BOS Election	59.1%

Differences in voters' tendencies to rank three candidates based on one's age were evident, but once again inconsistent. As Table 18 indicates, the youngest voters were most likely to report having ranked three candidates (74% of those voters under 25 years old ranked three), and the oldest voters were least likely (38% of those 80 and older did).

**Table 18. Voters Ranking Three Candidates by Age
(Chi-square = 28.52, p < .02, N = 915)**

	Ranked three
18-24 years	73.8%
25-29 years	57.8%
30-39 years	52.1%
40-49 years	55.7%
50-59 years	62.5%
60-69 years	48.3%
70-79 years	56.4%
80 years & older	37.5%

Education was related to voters' tendencies to rank three candidates, but not in an intuitive way. The least educated and the most educated voters were less likely to rank three candidates. About 44% of those with less than a high school education ranked three, and about half of those with more than a bachelor's degree ranked three. Meanwhile, nearly two-thirds (65%) of voters with

some college coursework but no bachelor’s degree reported ranking three candidates for Treasurer.

Table 19. Voters Ranking Three Candidates by Education
(Chi-square = 17.74, p < .03, N = 916)

	Ranked three
Less than HS	44.0%
HS grad	61.7%
Some college	64.6%
College grad	58.3%
Post-grad study	50.3%

Race and ethnicity were also strongly related to the likelihood that someone ranked three candidates. About 72% of African Americans ranked three, while only about a half (51%) of whites did. About two-thirds of Latinos (67%) and Asian (65%) voters said they ranked candidates. Meanwhile, 56% of voters of other ethnicities and races ranked three. These findings are seemingly counter-intuitive given the above findings that African Americans tended to be less aware than other groups that they would be expected to rank their preferences in these races. However, this seeming contradiction assumes that voters have three clear preferences to express. For instance, it is possible that those aware they would be ranking their preferences strategically chose to vote only for their most preferred choice or found it more difficult to discern between what they deemed to be inferior choices. As discussed below, there are various explanations to account for why voters rank less than three choices.

Table 20. Voters Ranking Three Candidates by Race/Ethnicity
(Chi-square = 23.82, p < .003, N = 909)

	Ranked three
Hispanic/Latino	67.4%
Asian/PI	64.7%
African American/Black	72.1%
White	51.4%
Other	56.4%

Looking across income groups, we see no systematic relationship in the tendency to rank three candidates. About 70% of those with a household income of less than \$10,000 said they ranked three candidates, relatively more than any other group. When compared all income categories, the difference is not statistically significant. However, a comparison between the lowest income group and all other voters combined does lead to a statistically significant difference (Chi-square = 4.02, p < .05).

Table 21. Voters Ranking Three Candidates by Income
(Chi-square = 12.77, p < .24, N = 893)

	Ranked three
Less than \$10,000	69.5%
\$10,000 - \$19,999	55.7%
\$20,000 - \$49,999	52.3%
\$50,000 - \$74,999	57.9%
\$75,000 - \$99,999	53.7%
\$100,000 or more	60.0%

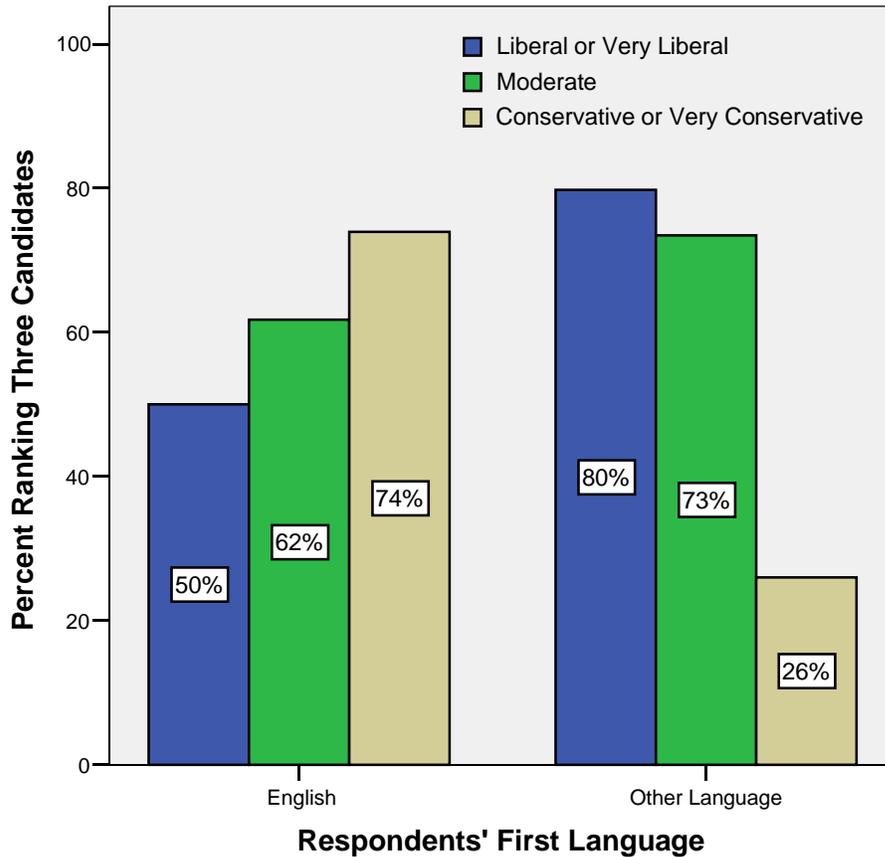
The tendency to rank three candidates was also related to one's first language. Those who first learned English were much less likely to rank three candidates (54% did) than were those who first learned something other than English, Spanish, or Chinese (81% of those voters ranked three). About two-thirds of the voters who first learned Chinese or Spanish ranked three candidates.

Table 22. Voters Ranking Three Candidates by First Language
(Chi-square = 19.20, p < .005, N = 906)

	Ranked three
English	53.8%
Chinese	65.4%
Spanish	67.3%
Other	81.0%

These data are sufficiently rich to look more closely at another mechanism by which ranking decisions might vary: ideology. As the left portion of Figure 4 shows, among native English speakers, the more conservative a voter was, the more likely he or she was to rank three candidates; nearly three-fourths of the self-described conservatives ranked three, while only half of the liberal voters ranked three. This contrasts to the influence of ideology among voters whose first language was something other than English. Among those voters the influence of ideology was reversed. Among the liberals, 80% said they ranked three candidates. Meanwhile only about one-fourth of the conservatives ranked three candidates.

Figure 4. Relationship between Ideology, Language, and Ranking Three Candidates (N = 892)



Within language group comparisons across ideological differences: Chi-square English = 14.43, $p < .002$; Chi-square Not English = 18.99, $p < .001$ Within ideology comparisons across language groups: Chi-Square Liberal = 22.35, $p < .001$; Chi-square Moderate = .217, $p < .15$; Chi-square Conservative = 11.52, $p < .002$

Summary

About one-third of the electorate reported choosing only one candidate on the RCV ballot for Treasurer. About 57% said they ranked three candidates. Several demographic factors were related to the likelihood that voters ranked three candidates. Voters most likely to rank three were the youngest (under 25 years), the moderately educated, the least wealthy, and those who first learned a language other than English. African-American voters were more likely to rank three, and whites were less likely. Among voters whose first language is English, the more conservative, the more likely one is to rank three. Among those whose first language is something else, the more conservative, the *less* likely one is to rank three candidates. Next, we look at the reasons voters gave for not ranking three candidates.

Reasons given for not ranking three candidates: Ranking as many candidates as was allowed in the San Francisco 2005 election is a good thing for a voter who has at least three preferences among the candidates running. Those voters will express themselves as fully as possible by ranking those preferences on the ballot. However, some voters will probably not have at least three preferences. For instance, someone may find one candidate acceptable and all of the others equally unacceptable. That voter may fully express his or her preferences by choosing only one candidate.

It is useful, therefore, to consider the above results regarding ranking candidates along with a question that helps determine why voters did not rank three candidates. We asked it this way: “If you ranked fewer than three candidates for Treasurer, what best describes the reason? (check all that apply).” Note that this was asked only of respondents who voted for City Treasurer, and only those who did not rank three candidates.

The most common reason voters gave for not ranking three candidates was that they did not know enough about the other candidates on the ballot. Nearly one-third (31%) of the voters who did not rank three candidates checked that as a reason. Just over one in five (21%) said that none of the other candidates were acceptable to them and about 8% said that they will probably always just pick one candidate. In other words, a sizeable majority of those ranking less than three candidates may have made a conscious or strategic choice to do so. However, a small proportion of voters (9%) reported ranking fewer than three choices because they did not know they could do so.

Table 23. Why Voters Did Not Rank Three Candidates

	Percent
I didn't know enough about the other candidates	31.2%
No other candidates were acceptable to me	21.2%
I didn't know I could rank three	8.9%
I'll probably always just pick one	7.9%
I didn't understand that part of the ballot	2.9%
My favorite candidate suggested that strategy	2.8%

Ease with which voters ranked candidates: We asked voters how easy it was to rank the candidates for City Treasurer. First, we asked how easy it was to choose a favorite candidate; that was followed by, “What about ranking your top three choices for Treasurer? Was that:” The answer options ranged from very easy to very difficult. Nearly half (46%) said it was either easy or very easy, while about 16% said it was either difficult or very difficult. In the tables below the responses were collapsed to report the proportions of voters who answered either “easy” or “very easy” across the categories of age, education, first language, race/ethnicity, and income.

**Table 24. Voters Saying that Ranking was Easy
(N = 1236)**

Very Easy	14.2%
Easy	32.0%
Neither Easy nor Difficult	37.7%
Difficult	13.5%
Very Difficult	2.7%

Voters between the ages of 40 and 79 tended to find the ranking task easier than others. About half of those voters said it was easy or very easy. Conversely, the youngest voters were least likely to say that ranking candidates was easy, with a little less than one-third (31%) giving those responses.

**Table 25. Voters Saying that Ranking was Easy by Age
(Chi-square = 24.28, p < .05, N = 1228)**

	Easy or Very Easy
18-24 years	31.3%
25-29 years	38.5%
30-39 years	41.6%
40-49 years	48.3%
50-59 years	50.2%
60-69 years	50.7%
70-79 years	52.1%
80 years & older	44.2%

Education was related to the ease with which voters ranked candidates. However, counter to our expectations, those voters without a high school diploma were the most likely to say that it was easy. Nearly two-thirds (66%) of voters with less than a high school education said ranking was easy, compared to 43% of the voters who were most educated.

**Table 26. Voters Saying that Ranking was Easy by Education
(Chi-square = 19.49, p < .02, N = 1225)**

	Easy or Very Easy
Less than HS	65.8%
HS grad	48.7%
Some college	48.5%
College grad	45.3%
Post-grad study	42.6%

Voters whose first language was Spanish were considerably more likely than others to say that ranking candidates was easy or very easy. Almost two-thirds (66%) gave those responses, compared to 45% among those who first learned English, 48% for those with Chinese as their first language, and 40% among voters who first learned some other language.

**Table 27. Voters Saying that Ranking was Easy by First Language
(Chi-square = 13.07, p < .05, N = 1217)**

	Easy or Very Easy
English	45.1%
Chinese	48.0%
Spanish	65.6%
Other	39.5%

Race and ethnicity were also related to the reported ease with which voters ranked the candidates for Treasurer. Latinos were more likely to say that ranking was easy or very easy (58%). Just under half of voters of all other ethnic or racial backgrounds (varying between 43% and 48%) indicated that it was easy.

**Table 28. Voters Saying that Ranking was Easy by Race/Ethnicity
(Chi-square = 17.79, p < .03, N = 1223)**

	Easy or Very Easy
Hispanic/Latino	58.4%
Asian/PI	43.7%
African American/Black	48.1%
White	45.0%
Other	43.2%

We found no systematic differences across income levels in how easy it was for voters to rank candidates. While the proportions who gave those responses varied from about 42% to 54% with those in the lowest income grouping and those in the second highest income category reporting greater levels of ease, those differences were not statistically significant.

**Table 29. Voters Saying that Ranking was Easy by Income
(Chi-square = 14.98, p < .14, N = 1194)**

	Easy or Very Easy
Less than \$10,000	54.3%
\$10,000 - \$19,999	43.9%
\$20,000 - \$49,999	46.2%
\$50,000 - \$74,999	41.5%
\$75,000 - \$99,999	51.6%
\$100,000 or more	44.7%

Summary

Many more voters said the ranking task was easy (46%) than said it was difficult (16%). Those who were more likely to say it was easy or very easy were middle-aged and older voters (40 to 79 years), the least educated, voters whose first language was Spanish, and Latino voters.

4. Opinions about RCV

We asked three questions to gauge voters’ opinions about the RCV system. First, we asked those who ranked candidates whether they were satisfied with number of candidates they could rank in the contest for City Treasurer. Four candidates competed for the office, but voters were allowed to rank only their top three choices. Second, we asked whether voters preferred RCV to the former two-stage runoff system. Finally, we asked what they thought about the fairness of the results under RCV compared to the former runoff system. The questions were worded this way:

How satisfied were you with the number of candidates you were allowed to rank?
 I was satisfied ranking three or fewer
 I wanted to rank more than three

What is your opinion of the Ranked-Choice Voting system (Instant Runoff)?
 I prefer Ranked-Choice Voting (RCV) to the former runoff system
 No difference to me between RCV and the former runoff system
 I prefer the former runoff system to RCV

How about the fairness of the results from Ranked-Choice Voting and the former runoff system? Would you say:
 RCV produces results that are more fair than the former runoff system
 No difference in the fairness of the results
 The former runoff system produces results that are more fair than RCV

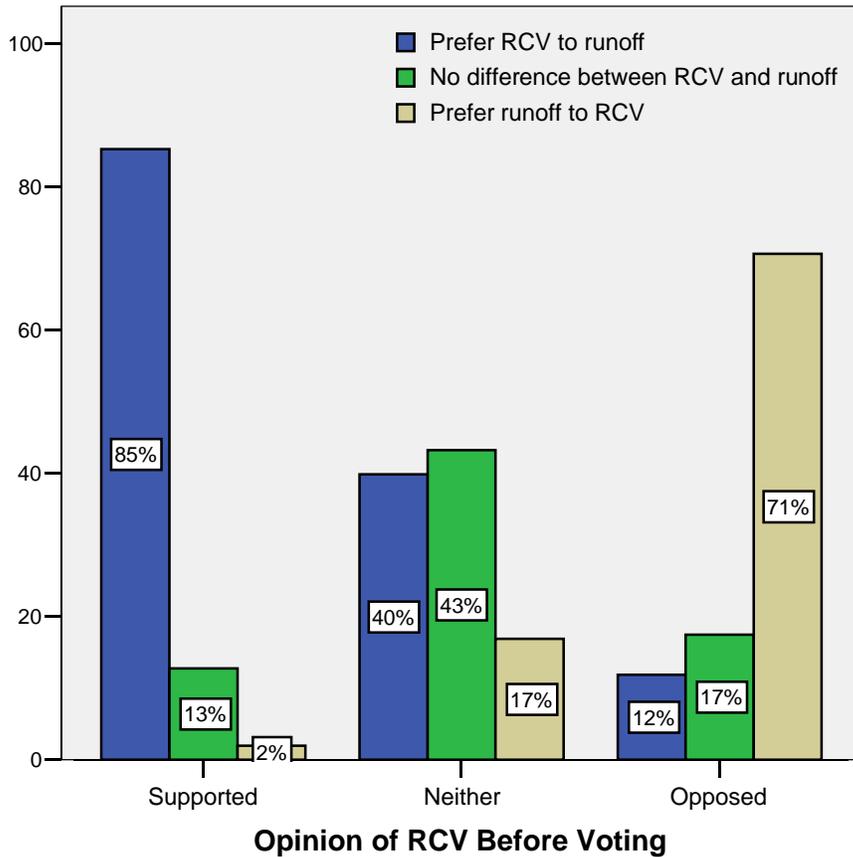
Satisfaction with the limit on the number of rankings: Only six percent of those who voted for Treasurer said they wanted to rank more than three candidates. Looking at the factors examined

above – age, education, race/ethnicity, language, and income – we see some differences. For instance, around 14% of the least educated voters said they wanted to rank more candidates, compared to only 3% of the most educated voters. About 4% of Asian voters and 5% of whites wanted to rank more candidates. This compares to 8% of Latinos, 9% of African Americans, and 13% of voters of other races and ethnicities. We saw no statistically significant differences in how satisfied voters were with the number of candidates they could rank based on age, first language, or income.

Preference for RCV versus runoff: As for preferences between RCV and the former runoff system, over three times as many voters prefer RCV (55%) than prefer the former runoff system (17%). A little over one-quarter (28%) expressed no difference between the two systems. Significant variation in opinions was observed across types of voters, as reported below. In doing so, we report the proportion preferring RCV for all factors except voters' age where we report the proportion preferring a runoff. We have chosen the data we believe are the most informative, and encourage readers to turn to the appendix for fuller results.

First, it is worth noting that most voters did not change their opinions in regard to Ranked-Choice Voting and the former runoff system after having participated in the election. As the left portion of Figure 5 shows, about 85% of those who came to vote preferring RCV still preferred it after voting. On the right-hand side of the figure we see that 71% of those who preferred the runoff continued to prefer it after having used RCV. It is useful to look at those voters who said they saw no difference between the two systems before voting—that is, the middle cluster of bars. Among such voters, we see that two in five (40%) prefer RCV to the runoff after voting, compared to fewer than one in five (18%) who prefer the runoff system.

Figure 5. Comparing Prior Opinions to Current Opinions of RCV



Age is strongly related to whether voters prefer RCV or the former runoff. Younger voters are less likely to prefer the runoff system. For example, among those 25 to 29 years old, only 8% gave that response. Meanwhile, three times that proportion of older voters said they prefer a runoff – 27% of voters in the sixties and 23% of voters in their seventies. And four times that proportion (33%) of voters eighty and older said they prefer the runoff system.

Table 30. Prefer Runoff to RCV by Age
(Chi-square = 60.06, p < .001, N = 1708)

	Prefer Runoff
18-24 years	12.7%
25-29 years	8.1%
30-39 years	12.1%
40-49 years	14.8%
50-59 years	18.6%
60-69 years	26.5%
70-79 years	22.7%
80 years & older	33.3%

We also see relatively large differences in voters' preferences for RCV based on one's first language. If that is English, then about 57% prefer RCV, if it is Chinese, 52% prefer RCV, if Spanish, then only 43% prefer RCV, and for those who first learned some other language, 42% prefer RCV to a runoff system.

Table 31. Prefer RCV to Runoff by First Language
(Chi-square = 21.77, p < .001, N = 1695)

	Prefer RCV
English	56.5%
Chinese	52.1%
Spanish	43.1%
Other	41.5%

Education is also strongly related to these opinions. Among the most educated, the proportion of voters preferring RCV approaches two-thirds (64%), while less than half of other voters expressed that preference. The less education voters have, the less likely they are to say they prefer RCV.

Table 32. Prefer RCV to Runoff by Education
(Chi-square = 50.44, p < .001, N = 1696)

	Prefer RCV
Less than HS	42.9%
HS grad	44.5%
Some college	48.5%
College grad	53.1%
Post-grad study	63.5%

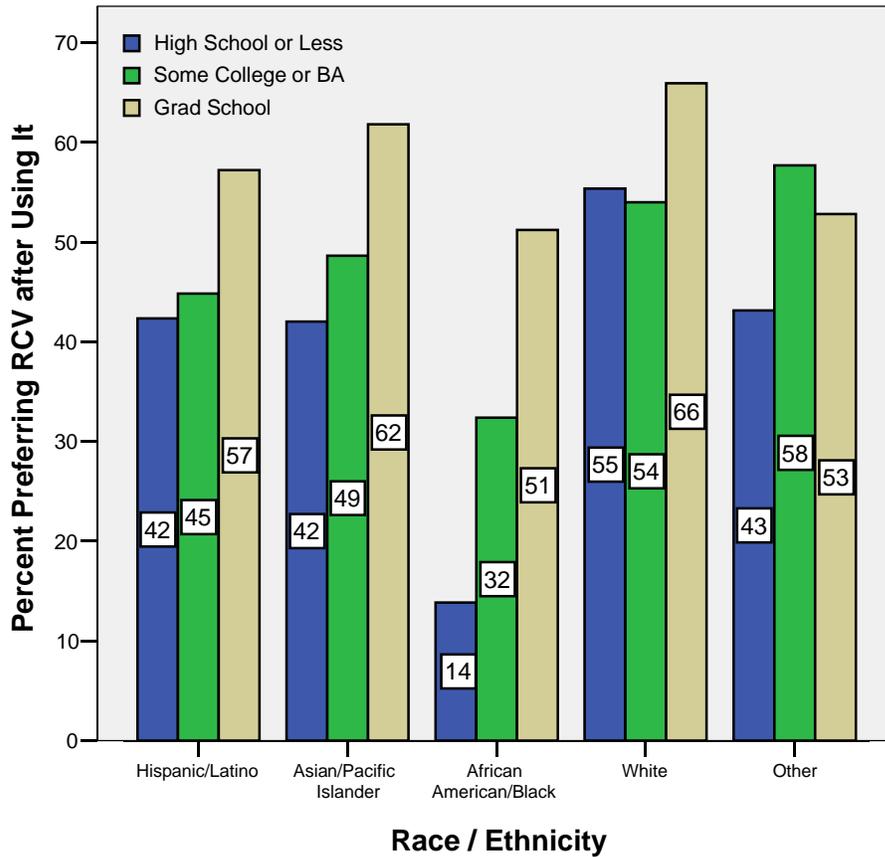
These attitudes also vary by race and ethnicity. Whites are most likely to say they prefer RCV, with 59% expressing that opinion. By contrast, under one-third (32%) of African Americans said they prefer RCV. About half (51%) of Asian voters prefer RCV, as do 47% of Latinos we surveyed. Among voters of other races and ethnicities, 54% said they prefer RCV to a runoff system.

Table 33. Prefer RCV to Runoff by Race/Ethnicity
(Chi-square = 49.73, p < .001, N = 1695)

	Prefer RCV
Hispanic/Latino	47.4%
Asian/PI	50.6%
African American/Black	32.2%
White	59.0%
Other	54.3%

The interaction between ethnicity and education level provides an interesting glimpse into voters' expressed preferences for Ranked-Choice Voting. First, compare the pattern within the clusters of bars in Figure 6, noting the influence of education within racial and ethnic groups. For most groups, higher education levels is related to increased support for RCV, most obviously so for African Americans. Next, compare the bars across race and ethnicities within education categories. Here we see that, controlling for education, the differences between groups remains significant, especially among the least educated, with white voters the most likely and African American voters the least likely to express a preference for RCV. Overall, what this shows is that both race/ethnicity and education are factors that explain preferences for the RCV system. Further, education is much more strongly related to one's opinion of RCV among Black voters than among other voters.

Figure 6. Relationship Between Education, Ethnicity, and Preference for RCV
(N = 1688)



Within racial group comparisons across education differences: Chi-square Latino = 2.48, $p < .65$; Chi-square Asian = 7.55, $p < .11$; Chi-square Black = 7.85, $p < .10$; Chi-square White = 31.11, $p < .001$; Chi-square Other = 3.90, $p < .42$. Within education level group comparisons across racial and ethnic groups: Chi-Square High School or Less = 19.07, $p < .01$; Chi-square Some College or BA = 18.33, $p < .02$; Chi-square Grad School = 19.59, $p < .01$.

Across income groups we also see large differences. The main one is between voters in households where the annual income is \$100,000 or more and the rest of the voters. Among those with the most income, 63% prefer RCV. Among other voters, the proportions preferring RCV range from 48% to 55%.

Table 34. Prefer RCV to Runoff by Income
(Chi-square = 40.61, p < .001, N = 1642)

	Prefer RCV
Less than \$10,000	48.4%
\$10,000 - \$19,999	54.8%
\$20,000 - \$49,999	50.0%
\$50,000 - \$74,999	53.4%
\$75,000 - \$99,999	52.8%
\$100,000 or more	63.1%

We uncover only a small difference in voters' preferences between those districts with prior experience using the ranked choice ballot and other districts. While 56% of voters residing in areas that elected a district Supervisor in 2004 preferred RCV, 52% of voters in other districts expressed a preference for ranked-choice voting, a difference that could have occurred by chance.

Table 35. Prefer RCV to Runoff by District Type
(Chi-square = 3.35, p < .19, N = 1716)

	Prefer RCV
Districts held 2004 BOS Election	56.3%
Districts did not hold 2004 BOS Election	52.3%

Summary

Voters were satisfied with ranking three of the four candidates for Treasurer, with relatively few people saying they wanted to rank more than three. Voters expressed a preference for the RCV system over the former runoff system by a ratio greater than three to one. Over half (55%) said they prefer RCV. Older voters were more likely than younger voters to prefer the runoff system. Voters who tended to express more preference for RCV were those with some graduate school training, those whose first language was English or Chinese, white voters, and those in the top income category. Voters who were the least likely to prefer RCV were African Americans (32% preferred RCV versus 21% who preferred the runoff) and the elderly, 80 years and older (44% preferred RCV versus 33% for a runoff system). Note that, even among these voters who favored RCV the least, more of them preferred RCV than preferred the former runoff system.

Relative fairness: Voters were asked to compare RCV with the former runoff system in terms of the perceived fairness of the election results. Over twice as many respondents said that they thought RCV produces results that are more fair than those indicating that the previous voting method was more fair. Thirty-seven percent responded that way, compared to 15% who said the former runoff system produced better outcomes. The plurality of voters, very nearly one-half (48%) saw no difference between the different voting systems.

**Table 36. Opinion about the Fairness of Results under RCV versus Runoff
(N = 1629)**

RCV results are more fair than the former runoff system	37.0%
No Difference	48.1%
Former runoff system results are more fair than RCV	15.0%

Only minimal differences are found between those areas with prior experience with the ranked-choice ballot. In both sets of precincts voters perceived RCV as more fair than the runoff system by wide margins.

**Table 37. Opinion about the Fairness of Results under RCV versus Runoff by District Type
(Chi-square = 1.07, p < .59, N = 1629)**

	Runoff more fair than RCV
Districts held 2004 BOS Election	14.3%
Districts did not hold 2004 BOS Election	16.0%

Age is strongly related to these attitudes. Nearly one-third of the oldest voters (30%) said the former system produced more fair results, while only 7% of the youngest voters gave that response.

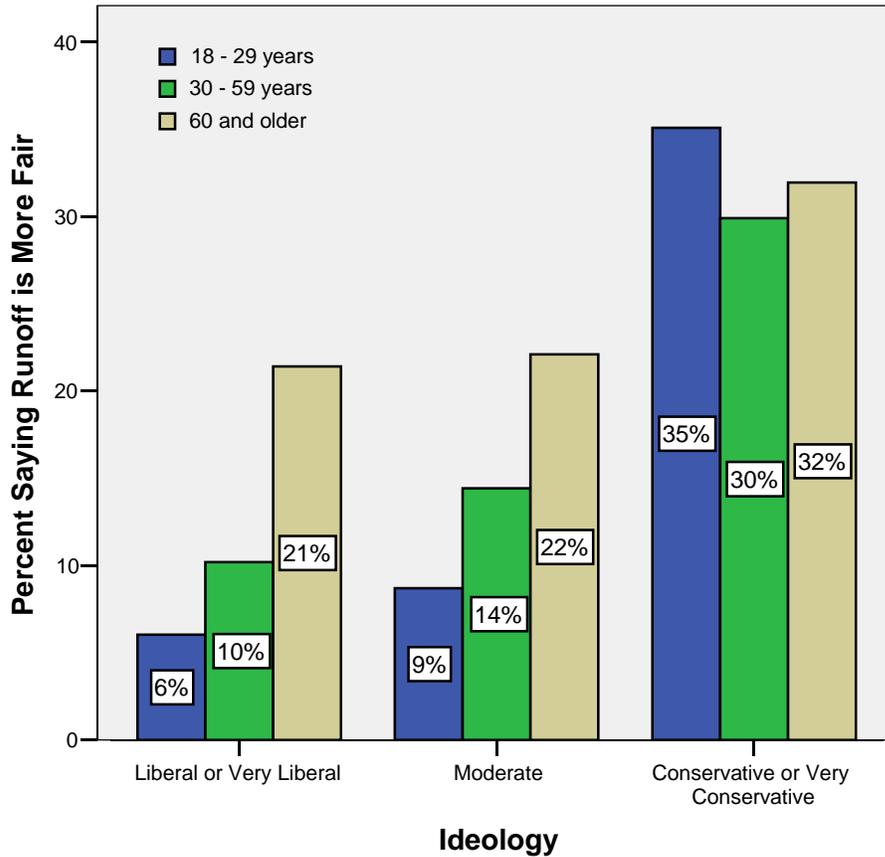
**Table 38. Opinion about the Fairness of Results under RCV versus Runoff by Age
(Chi-square = 50.14, p < .001, N = 1622)**

	Runoff more fair than RCV
18-24 years	7.0%
25-29 years	8.9%
30-39 years	9.8%
40-49 years	13.9%
50-59 years	15.9%
60-69 years	23.6%
70-79 years	20.6%
80 years & older	30.4%

The degree to which one's age explains one's preference for RCV versus the runoff system depends on one's ideology. Figure 7 displays this. Among respondents who call themselves liberal or very liberal, older voters tend to prefer the runoff more than do younger voters. By contrast, among conservatives we see similar attitudes across age groups, with about one-third preferring the former runoff system to RCV. Meanwhile, although the pattern among moderate

voters resembles that of liberal voters, those differences are not statistically significant. It appears that among conservatives one's ideology trumps one's age as a factor that shapes opinions about the fairness of the two election systems.

Figure 7. Relationship Between Ideology, Age, and Perceptions of Fairness of RCV (N = 1596)



Within ideological group comparisons across age groups: Chi-square liberal = 24.50, $p < .001$; Chi-square moderate = 6.82, $p < .15$; Chi-Square conservative = 3.96, $p < .42$. Within age group comparisons across ideology groups: Chi-Square 18 – 29 yrs = 14.81, $p < .01$; Chi-square 30 – 59 yrs = 32.83, $p < .001$; Chi-square 60 yrs and over = 11.35, $p < .05$

Voters with less than a high school education were more likely to say that the runoff system produces better results than RCV. One in five (21%) of those voters gave that response, a higher rate than was seen among voters with more education (between 13% and 17%).

Table 39. Opinion about the Fairness of Results under RCV versus Runoff by Education (Chi-square = 19.42, p < .02, N = 1611)

	Runoff more fair than RCV
Less than HS	20.5%
HS grad	16.8%
Some college	15.5%
College grad	13.4%
Post-grad study	15.5%

Language was not meaningfully related to opinions about fairness. While voters whose first language was English were less likely to say that the runoff produces fairer results, the difference was about 3% and could have occurred by chance.

Table 40. Opinion about the Fairness of Results under RCV versus Runoff by First Language (Chi-square = 3.78, p < .71, N = 1610)

	Runoff more fair than RCV
English	14.5%
Chinese	17.4%
Spanish	17.7%
Other	17.4%

Some marginal differences were observed across race and ethnic groupings. Slightly larger proportions of Asian (18%) and Black (19%) voters said they thought the runoff system produced more fair results than did Latinos (13%), whites (14%), and voters of other races and ethnicities (15%).

Table 41. Opinion about the Fairness of Results under RCV versus Runoff by Race/Ethnicity (Chi-square = 14.46, p < .07, N = 1612)

	Runoff more fair than RCV
Hispanic/Latino	13.0%
Asian/PI	18.1%
African American/Black	18.5%
White	13.8%
Other	14.6%

Meanwhile, voters' income level was not systematically related to their opinions about the fairness of the RCV and runoff systems.

Table 42. Opinion about the Fairness of Results under RCV versus Runoff by Income (Chi-square = 3.80, p < .96, N = 1562)

	Runoff more fair than RCV
Less than \$10,000	13.5%
\$10,000 - \$19,999	17.1%
\$20,000 - \$49,999	12.4%
\$50,000 - \$74,999	14.5%
\$75,000 - \$99,999	15.6%
\$100,000 or more	14.6%

Summary

Generally, San Franciscan voters think that RCV produces results that are more fair than those produced under the former runoff system. Some relatively small differences in opinion were found based on education and race/ethnicity, with the least educated voters and Asian and African American voters more likely to say the runoff system produces fairer results. However, larger differences were observed across age groups. About 30% of the oldest voters and over 20% of voters between 60 and 80 years think that a runoff system produces results that are more fair than RCV. Among conservatives, however, we see no such differences based on age. Again, we reiterate that even among the groups who express the least favorable opinions of RCV, on balance those opinions are positive.

SUMMARY

Our intention in this study was to assess the ease with which voters in San Francisco are making the transition from a majority runoff system to a less common preferential voting system, called Ranked-Choice Voting. We aimed to examine practical questions from the voters' perspective: How easy or difficult was RCV to use? And what did voters think about the system after having used it? The answers to these questions matter for the community as it moves forward under the RCV system. Democratic ideals demand that the franchise be experienced equally among various types of citizens. The findings are also pertinent beyond San Francisco as other jurisdictions move to adopt election systems like RCV.

An important analytical note must be emphasized: these results describe the current state of affairs. Our findings do not, and cannot, identify the specific impact of reforming to the RCV system. That would require comparable data from the same population of voters using the former runoff system, something we do not have. Some of the differences and discrepancies we uncover would undoubtedly occur regardless of what election system is in place. That said, we think that this report provides valuable information about RCV and voters' experience with it, particularly when viewed in conjunction with our comparable study of the 2004 election.

The evidence above suggests that most voters are readily adapting to Ranked-Choice Voting. Nearly nine in ten say that, overall, they understood RCV, a figure that matches findings from the 2004 election survey. Some variation in levels of understanding occurred, with the least educated, those whose first language was Chinese, and those with low income more likely to say they did not understand it. However, in all subgroups surveyed at least three-fourths of voters indicated that they understood RCV.

Over half of the voters surveyed reported ranking three candidates, while one-third reported only listing one candidate on the ranking portion of the ballot. The most common reasons given for not ranking three candidates were that voters lacked information about the other candidates, and voters saw the other candidates as unacceptable. Although other versions of this type of election system allow or require voters to rank more than three candidates, relatively few San Francisco voters were dissatisfied with being limited to three rankings. It is possible, however, that this finding is particular to the election of the City Treasurer in which only four candidates were on the ballot and that voters would report different attitudes in races involving greater numbers of contestants. In this election, though, many more voters told us that the ranking task was easy than said it was difficult.

Opinions about RCV, though varied, are generally quite positive. Slightly over half of the voters we surveyed said that they prefer it to the runoff system; however, because many respondents saw no difference between the two, that figure is more than three times as many as those who said that they prefer the two-stage runoff. Clear differences in preferences emerge between racial and ethnic groups, with whites reporting the most positive responses and African-Americans the least positive.

Another opinion we measured was voters' perceptions about the relative fairness of RCV and the runoff system. The most common response was that both produce equally fair results. Of those

who saw a difference, more than twice as many said RCV was more fair than said the runoff was more fair. Differences were observed across age groups, with higher proportions of older than younger voters preferring the runoff system. However, among conservatives those preferences did not vary by age. On these three types of opinion, then—preference between the two systems, satisfaction with the three-candidate limit, and relative fairness—the prevailing attitudes of voters we surveyed is favorable for RCV.

These positive reports about voter perceptions and degrees of understanding should be tempered, however, with another finding. Nearly half (46%) of the voters we surveyed said they did not know they would be asked to rank candidates on the fall 2005 ballot. This is a considerably larger proportion than was found in the fall of 2004 (31%), and clearly puts some voters at a disadvantage. Those who were least aware tended to be the least educated and African-Americans. We see the issue of voter awareness as the main area of concern for San Francisco as the community moves forward with RCV elections.

As explained above, the City's Department of Elections went to considerable lengths to inform voters about RCV. Over 150 presentations were conducted to educate voters, and all of these included a segment on Ranked-Choice Voting. In addition, voters were informed through the mail, through ads in neighborhood papers, press briefings, public service announcements, an internet website, and brochures. The information was disseminated in several languages to reach the diverse groups of voters in San Francisco. Notwithstanding these outreach efforts, a large proportion of voters said they did not know they would be asked to rank candidates on the ballot.

One possible explanation for the lower rate of awareness in 2005 is that voters paid less attention to the citywide races in 2005 than they did to the district races in 2004. In the fall of 2005 many voters turned out to vote because of the controversial and highly publicized ballot propositions in the statewide special election. Some of those voters may have been unaware or only vaguely aware of the local races. However, that reasoning might also apply in 2004 when voters turning out to vote in the presidential election might have paid less attention to the local races further down on the ballot. Still, the relatively competitive nature of the 2004 elections, the levels of media attention devoted to those contests, and the amount of public attention surrounding the first use of the RCV ballot might account for differences between the two elections.

We see a slight improvement in awareness of RCV with experience: voters in districts that were holding RCV elections for the second time tended to be more aware of RCV than voters in districts using it for the first time. But even then, the numbers remain lower in 2005 than in 2004. Another difference was observed among language groups. Although we can provide no explanation at this time, it is worth noting that native Spanish speakers were more aware of RCV in 2005 than in 2004.

To summarize, voters in San Francisco appear to be adjusting well to the Ranked-Choice Voting system. From a variety of indicators we see that their experience with RCV was a positive one. Eighty-seven percent of those we surveyed said they understood it fairly well or perfectly well, and they prefer it to the former runoff system by a three-to-one margin. Generally, voters say they do not find the ranking task to be difficult. And, while a sizeable proportion did not rank three candidates, their reasons are sensible. On the factors we examined, some differences

emerge across education, language, and racial/ethnic groups. In addition, a troubling proportion of voters said that they were unaware that they would be asked to rank candidates on the ballot. We encourage actors in the community, in both the official and advocate capacities, to attend to these differences across groups, especially in regard to awareness of RCV, and to focus resources on minimizing them. While the transition to RCV appears to have been a smooth one, we see this as an area for improvement. As elections under RCV proceed, and as voters become more familiar with that portion of the ballot, it would be useful to track their experiences and conduct further assessments.

Appendix A: Survey Questionnaire

San Francisco State University 2005 Election 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, and other topics. 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, 415-338-8733

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.

1. What is your age?

- 18-24 40-49 70-79
 25-29 50-59 80 & older
 30-39 60-69

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

- Did not finish high school
 High school graduate or GED
 Some college or Associate Degree
 College graduate
 Post-graduate study

3. What is your Race or Ethnicity?

- Hispanic/Latino White
 Asian/Pacific Islander American Indian
 African American/Black Other

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

- English Spanish
 Chinese Other

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

- Less than \$10,000 \$50,000-\$74,999
 \$10,000-\$19,999 \$75,000-\$99,999
 \$20,000-\$49,999 \$100,000 or more

6. Before coming to vote today, did you know you would be asked to rank your choices for the Treasurer and Assessor?

- Yes No

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

- Supported it
 Neither supported nor opposed it
 Opposed it

8 - 13. How did you just vote on:

	For	Against	Neither
Local Prop. C (Ethics Com.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local Prop. D (MUNI board)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local Prop. H (Firearm ban)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Prop. 73 (Abortion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Prop. 75 (Union dues)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Prop. 76 (Budgeting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

- Never before this time
 Occasionally
 Usually
 Always

15. In some places, all voters cast their ballots by mail and there are no polling places. What do you think about San Francisco adopting a system like that, where everyone would vote as absentee voters do now?

- Approve strongly
 Approve
 Neither approve nor disapprove
 Disapprove
 Disapprove strongly

The next questions ask about the San Francisco Voter Information Pamphlet that the Department of Elections sends in the mail.

16. What do you think about the overall size of the Information Pamphlet?

- Much too long
 Somewhat too long
 Just about right
 Somewhat too short
 Much too short

17. Generally speaking, how useful is the Voter Information Pamphlet to you?

- Very useful
 Somewhat useful
 Not very useful
 Not useful at all

18. Currently, the Pamphlet contains a summary of ballot measures, one official argument for each measure and one against, and paid arguments for and against the measures. Do you find the paid arguments in the Pamphlet useful or not?

- Very useful
 Somewhat useful
 Not very useful
 Not useful at all

19. Other cities have briefer, less costly Pamphlets. What do you think about having a briefer Pamphlet, even if that means omitting the paid arguments?

- Approve strongly
 Approve
 Neither approve nor disapprove
 Disapprove
 Disapprove strongly

PLEASE TURN THE QUESTIONNAIRE OVER ➡

20. How did you rank your preferences for City Treasurer? Put an "X" in the boxes below to show the choices you marked on the actual ballot. (If you didn't vote for Treasurer, then go to question 26)

<u>FIRST CHOICE</u>	<u>SECOND CHOICE</u>	<u>THIRD CHOICE</u>
Jose Cisneros <input type="checkbox"/>	Jose Cisneros <input type="checkbox"/>	Jose Cisneros <input type="checkbox"/>
Manuel Valle <input type="checkbox"/>	Manuel Valle <input type="checkbox"/>	Manuel Valle <input type="checkbox"/>
Calvin Louie <input type="checkbox"/>	Calvin Louie <input type="checkbox"/>	Calvin Louie <input type="checkbox"/>
Isaac Wang <input type="checkbox"/>	Isaac Wang <input type="checkbox"/>	Isaac Wang <input type="checkbox"/>

21. If you ranked fewer than three candidates for Treasurer, what best describes the reason? (check all that apply)

- I didn't know I could rank three
- I didn't understand that part of the ballot
- I didn't know enough about the other candidates
- No other candidates were acceptable to me
- My favorite candidate suggested that strategy
- I'll probably always just pick one
- I ranked three candidates

22. How satisfied were you with the number of candidates you were allowed to rank?

- I was satisfied ranking three or fewer
- I wanted to rank more than three

23. Sometimes it's easy to choose a favorite candidate from among those running, and other times it's hard. What about this election for City Treasurer? How easy or difficult was it for you to decide who your first choice was?

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

24. What about ranking your top three choices for Treasurer? Was that:

- Very Easy
- Easy
- Neither Difficult nor Easy
- Difficult
- Very Difficult
- I didn't rank three choices

25. Overall, how would you describe your experience with Ranked-Choice Voting for City Treasurer and/or Assessor-Recorder?

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

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

- Very familiar
- Somewhat familiar
- Not very familiar
- Not at all familiar

27. What is your opinion of the Ranked-Choice Voting system (Instant Runoff)?

- I prefer Ranked-Choice Voting to the former runoff system
- No difference to me between Ranked-Choice Voting and the former runoff system
- I prefer the former runoff system to Ranked-Choice Voting

28. How about the fairness of the results from Ranked-Choice Voting and the former runoff system? Would you say:

- Ranked-Choice Voting produces results that are more fair than the former runoff system
- No difference in the fairness of the results
- The former runoff system produces results that are more fair than Ranked-Choice Voting

29. How long have you lived in San Francisco?

- less than 1 year
- 1 - 5 years
- 6 - 10 years
- 11 - 20 years
- over 20 years

30. How long have you lived at your present address?

- less than 1 year
- 1 - 5 years
- 6 - 10 years
- 11 - 20 years
- over 20 years

31. Do you rent or own your place of residence?

- Rent
- Own (or buying)
- Neither

32. What is your gender?

- Female
- Male

33. Did you happen to vote in last November's local election for Board of Supervisors?

- Yes
- No
- I don't know

34. How interested have you been in the political campaigns this year?

- Very much interested
- Somewhat interested
- Not much interested

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

- Very liberal
- Liberal
- Moderate
- Conservative
- Very Conservative

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

- Republican
- Democrat
- Independent
- Something else

Please fold your questionnaire and put it in the box. Thank you!

**Appendix B: Frequency Tables of Pertinent Variables
(Weighted Data)**

Q1. Age of Participant

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	110	5.7	5.7	5.7
	25-29	169	8.8	8.8	14.6
	30-39	399	20.8	20.9	35.4
	40-49	371	19.3	19.4	54.8
	50-59	389	20.2	20.4	75.2
	60-69	241	12.5	12.6	87.8
	70-79	152	7.9	7.9	95.7
	80 & older	82	4.3	4.3	100.0
	Total	1912	99.4	100.0	
Missing	System	11	.6		
Total		1923	100.0		

Q2. Last grade completed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not finish high school	54	2.8	2.9	2.9
	High school graduate or GED	159	8.2	8.4	11.2
	Some college or Associate Degree	399	20.7	21.0	32.3
	College graduate	629	32.7	33.2	65.5
	Post-graduate study	654	34.0	34.5	100.0
	Total	1894	98.5	100.0	
Missing	System	29	1.5		
Total		1923	100.0		

Q3. Race or ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hispanic/Latino	151	7.9	8.1	8.1
	Asian/Pacific Islander	283	14.7	15.2	23.4
	African American/Black	129	6.7	6.9	30.3
	White	1205	62.7	64.8	95.1
	American Indian	7	.4	.4	95.5
	Other	84	4.3	4.5	100.0
	Total	1860	96.7	100.0	
Missing	System	63	3.3		
Total		1923	100.0		

Q4. First language learned

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	1544	80.3	81.7	81.7
	Chinese	135	7.0	7.1	88.8
	Spanish	77	4.0	4.1	92.9
	Other	135	7.0	7.1	100.0
	Total	1891	98.3	100.0	
Missing	System	32	1.7		
Total		1923	100.0		

Q5. household's total yearly income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$10,000	105	5.5	5.8	5.8
	\$10,000-\$19,999	145	7.5	8.0	13.7
	\$20,000-\$49,999	427	22.2	23.4	37.2
	\$50,000-\$74,999	375	19.5	20.6	57.8
	\$75,000-\$99,999	275	14.3	15.1	72.9
	\$100,000 or more	494	25.7	27.1	100.0
	Total	1821	94.7	100.0	
Missing	System	102	5.3		
Total		1923	100.0		

Q6. Knowledge that RCV would be used in Treasurer and Assessor election

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1031	53.6	54.2	54.2
	no	871	45.3	45.8	100.0
	Total	1902	98.9	100.0	
Missing	System	21	1.1		
Total		1923	100.0		

Q7. Opinion of RCV prior to voting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Supported it	740	38.5	39.6	39.6
	Neither supported nor opposed it	914	47.5	48.9	88.5
	Opposed it	214	11.1	11.5	100.0
	Total	1868	97.2	100.0	
Missing	System	55	2.8		
Total		1923	100.0		

Q14. How often would you say you vote in elections

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never before this time	15	.8	.8	.8
	Occasionally	34	1.8	1.8	2.6
	Usually	290	15.1	15.3	17.9
	Always	1556	80.9	82.1	100.0
	Total	1895	98.5	100.0	
Missing	System	28	1.5		
Total		1923	100.0		

(Tables for Q20 through Q21g report polling place voters only. See text of the report for details.)

Q20. How did you rank your preferences for City Treasurer? First Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Jose Cisneros	633	48.9	69.0	69.0
	Manuel Valle	33	2.6	3.6	72.6
	Calvin Louie	181	14.0	19.7	92.3
	Isaac Wang	70	5.4	7.7	100.0
	Total	917	70.9	100.0	
Missing	0	374	28.9		
	System	2	.1		
	Total	376	29.1		
Total		1292	100.0		

Q20. How did you rank your preferences for City Treasurer? Second Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Jose Cisneros	129	10.0	21.0	21.0
	Manuel Valle	135	10.4	21.9	42.8
	Calvin Louie	203	15.7	32.9	75.8
	Isaac Wang	149	11.6	24.2	100.0
	Total	616	47.6	100.0	
Missing	0	673	52.1		
	System	3	.3		
	Total	677	52.4		
Total		1292	100.0		

Q20. How did you rank your preferences for City Treasurer? Third Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Jose Cisneros	106	8.2	20.2	20.2
	Manuel Valle	136	10.5	25.8	46.0
	Calvin Louie	132	10.2	25.2	71.2
	Isaac Wang	151	11.7	28.8	100.0
	Total	526	40.7	100.0	
Missing	0	762	59.0		
	System	5	.4		
	Total	767	59.3		
Total		1292	100.0		

Q21a. I didn't know I could rank three

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Checked	858	66.4	91.1	91.1
	Checked	84	6.5	8.9	100.0
	Total	942	72.9	100.0	
Missing	System	350	27.1		
Total		1292	100.0		

Q21b. I didn't understand that part of the ballot

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Checked	915	70.8	97.1	97.1
	Checked	27	2.1	2.9	100.0
	Total	942	72.9	100.0	
Missing	System	350	27.1		
Total		1292	100.0		

Q21c. I didn't know enough about the other candidates

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Checked	648	50.2	68.8	68.8
	Checked	294	22.7	31.2	100.0
	Total	942	72.9	100.0	
Missing	System	350	27.1		
Total		1292	100.0		

Q21d. No other candidates were acceptable to me

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Checked	742	57.4	78.7	78.7
	Checked	200	15.5	21.3	100.0
	Total	942	72.9	100.0	
Missing	System	350	27.1		
Total		1292	100.0		

Q21e. My favorite candidate suggested that strategy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Checked	915	70.8	97.2	97.2
	Checked	27	2.1	2.8	100.0
	Total	941	72.8	100.0	
Missing	System	351	27.2		
Total		1292	100.0		

Q21f. I'll probably always just pick one

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Checked	868	67.2	92.2	92.2
	Checked	74	5.7	7.8	100.0
	Total	942	72.9	100.0	
Missing	System	350	27.1		
Total		1292	100.0		

Q21g. I ranked three candidates

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Checked	657	50.8	69.7	69.7
	Checked	285	22.1	30.3	100.0
	Total	942	72.9	100.0	
Missing	System	351	27.1		
Total		1292	100.0		

Q22. How satisfied were you with the number of candidates you were allowed to rank?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I was satisfied ranking three or fewer	1427	74.2	93.2	93.2
	I wanted to rank more than three	105	5.5	6.8	100.0
	Total	1532	79.7	100.0	
Missing	System	391	20.3		
Total		1923	100.0		

Q23. Sometimes it's easy to choose a favorite candidate,,,and other times it's hard. What about this election for Treasurer? How easy or difficult was it for you to decide who your first choice was?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Easy	283	14.7	17.4	17.4
	Easy	506	26.3	31.2	48.6
	Neither difficult nor Easy	570	29.6	35.1	83.7
	Difficult	219	11.4	13.5	97.2
	Very Difficult	46	2.4	2.8	100.0
	Total	1624	84.4	100.0	
Missing	System	299	15.6		
Total		1923	100.0		

Q24. What about ranking your top three choices for Treasurer? Was that:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Easy	187	9.7	11.6	11.6
	Easy	444	23.1	27.6	39.2
	Neither difficult nor Easy	549	28.5	34.1	73.2
	Difficult	213	11.1	13.2	86.5
	Very Difficult	46	2.4	2.9	89.3
	Didn't rank three choices	172	8.9	10.7	100.0
	Total	1611	83.8	100.0	
Missing	System	312	16.2		
Total		1923	100.0		

Q25. Overall, how would you describe your experience with Ranked-Choice Voting for City Treasurer and / or Assessor-Recorder?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Understood it perfectly well	843	43.8	51.6	51.6
	Understood it fairly well	581	30.2	35.6	87.1
	Did not understand it entirely	161	8.4	9.9	97.0
	Did not understand it at all	49	2.5	3.0	100.0
	Total	1633	84.9	100.0	
Missing	System	290	15.1		
Total		1923	100.0		

Q26. Before coming to vote today, how familiar were you with Ranked-Choice Voting (Instant Runoff Voting)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very familiar	633	32.9	35.5	35.5
	Somewhat familiar	687	35.7	38.5	74.0
	Not very familiar	309	16.1	17.3	91.4
	Not at all familiar	154	8.0	8.6	100.0
	Total	1783	92.7	100.0	
Missing	System	140	7.3		
Total		1923	100.0		

Q27. What is your opinion of the Ranked-Choice Voting system (Instant Runoff)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I prefer Ranked-Choice Voting to the former runoff system	939	48.8	54.7	54.7
	No difference to me between ranked-Choice voting and the for	484	25.2	28.2	82.9
	i prefer the former runoff system to ranked-Choice Voting	293	15.2	17.1	100.0
	Total	1716	89.2	100.0	
Missing	System	207	10.8		
Total		1923	100.0		

Q28. How about the fairness of the results from Ranked-Choice voting and the former runoff system? Would you say:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ranked-Choice Voting produces results that are more fair	602	31.3	37.0	37.0
	No difference in the fairness of the results	783	40.7	48.1	85.0
	The former runoff system produces results more fair	244	12.7	15.0	100.0
	Total	1629	84.7	100.0	
Missing	System	294	15.3		
Total		1923	100.0		

Q32. What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	948	49.3	52.0	52.0
	Male	875	45.5	48.0	100.0
	Total	1823	94.8	100.0	
Missing	System	100	5.2		
Total		1923	100.0		

Q33. did you happen to vote in last November's local election for Board of Supervisors?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1565	81.4	86.1	86.1
	No	170	8.9	9.4	95.4
	I don't know	83	4.3	4.6	100.0
	Total	1818	94.5	100.0	
Missing	System	105	5.5		
Total		1923	100.0		

Q35. On most political matters, do you consider yourself:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very liberal	382	19.8	21.2	21.2
	Liberal	680	35.4	37.8	59.0
	Moderate	577	30.0	32.1	91.0
	Conservative	139	7.2	7.7	98.7
	Very Conservative	23	1.2	1.3	100.0
	Total	1801	93.6	100.0	
Missing	System	122	6.4		
Total		1923	100.0		

Q36. No matter how you voted today, do you usually think of yourself as:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Republican	153	8.0	8.4	8.4
	Democrat	1105	57.4	60.8	69.2
	Independent	369	19.2	20.3	89.5
	Something else	190	9.9	10.5	100.0
	Total	1817	94.5	100.0	
Missing	System	106	5.5		
Total		1923	100.0		

Appendix C: Bivariate Report on Select Variables

The tables below report the bivariate relationship between seven key variables and a set nine factors. The key variables are responses to the following questions:

Q6. Before coming to vote today, did you know you would be asked to rank your choices for the Treasurer and Assessor? Yes, No

Q20. How did you rank your preferences for City Treasurer? Put an “X” in the boxes below to show the choices you marked on the actual ballot.

Q22. How satisfied were you with the number of candidates you were allowed to rank? I was satisfied ranking three or fewer, I wanted to rank more than three

Q24. What about ranking your top three choices for Treasurer? Was that: Very Easy, Easy, Neither Difficult nor Easy, Difficult, Very Difficult, I didn’t rank three choices

Q25. Overall, how would you describe your experience with Ranked-Choice Voting for City Treasurer and/or Assessor-Recorder? Understood it perfectly well, Understood it fairly well, Did not understand it entirely, Did not understand it at all

Q27. What is your opinion of the Ranked-Choice Voting system (Instant Runoff)? I prefer Ranked-Choice Voting to the former runoff system, No difference to me between Ranked-Choice Voting and the former runoff system, I prefer the former runoff system to Ranked-Choice Voting

Q28. How about the fairness of the results from Ranked-Choice Voting and the former runoff system? Would you say: Ranked-Choice Voting produces results that are more fair than the former runoff system, No difference in the fairness of the results, The former runoff system produces results that are more fair than Ranked-Choice Voting

The nine factors are age, education, race/ethnicity, first language, income, gender, BOS district, political party identification, and political ideology. Please see the questionnaire in Appendix A for the complete question wording of those items.

Cells in the tables contain the row percentages of the valid cases (i.e., if someone did not answer the question, then that case was disregarded). All data are weighted. Caution should be exercised in interpreting estimates drawn from a small number of cases.

Due to an error in printing, the measure of how many candidates absentee voters ranked was compromised. Therefore, only the responses from polling place voters are reported in that table.

Q6. Aware of RCV Prior to Coming to Vote		Yes, Knew (%)	Sample N
(entries are row percentages)			
Total Sample (all voters surveyed)		54.2%	1902
By Age			
	18-24 years	51.8%	110
	25-29 years	50.9%	167
	30-39 years	54.9%	399
	40-49 years	52.7%	368
	50-59 years	50.9%	387
	60-69 years	63.4%	235
	70-79 years	56.8%	148
	80 years & older	55.0%	80
By Education			
	Less than HS	43.4%	53
	HS grad	53.2%	154
	Some college	50.4%	395
	College grad	52.2%	627
	Post-grad study	60.6%	647
By Race/Ethnicity:			
	Hispanic/Latino	59.3%	150
	Asian/PI	51.6%	279
	African American/Black	41.9%	129
	White	56.0%	1194
	Other	50.4%	123
By First Language:			
	English	54.9%	1531
	Chinese	53.4%	133
	Spanish	61.3%	75
	Other	47.4%	135
By District:			
	District 1	62.3%	154
	District 2	50.3%	195
	District 3	55.3%	141
	District 4	49.7%	155
	District 5	56.5%	207
	District 6	54.0%	137
	District 7	60.5%	205
	District 8	49.5%	281
	District 9	52.7%	148
	District 10	41.0%	122
	District 11	66.4%	116
By Income:			
	Less than \$10,000	49.0%	104
	\$10,000 - \$19,999	55.9%	143
	\$20,000 - \$49,999	53.7%	423
	\$50,000 - \$74,999	52.4%	374
	\$75,000 - \$99,999	59.3%	275
	\$100,000 or more	54.1%	492
By Gender:			
	Female	53.3%	940
	Male	54.5%	871
By Political Ideology:			
	Very Liberal	58.3%	379
	Liberal	54.0%	674
	Moderate	51.3%	573
	Conservative	51.8%	137
	Very Conservative	60.9%	23
By Political Party:			
	Republican	52.3%	149
	Democrat	51.8%	1097
	Independent	56.8%	368
	Something Else	64.6%	189

Q20. Number of Candidates Ranked (polling place voters only)		Chose Only One (%)	Ranked Two (%)	Ranked Three (%)	Sample N
(entries are row percentages)					
Polling Place Sample (all surveyed)		33.1%	10.4%	56.5%	921
By Age					
	18-24 years	18.5%	7.7%	73.8%	65
	25-29 years	34.3%	7.8%	57.8%	102
	30-39 years	38.0%	9.9%	52.1%	242
	40-49 years	31.4%	12.9%	55.7%	210
	50-59 years	26.9%	10.6%	62.5%	160
	60-69 years	36.0%	15.7%	48.3%	89
	70-79 years	43.6%	0%	56.4%	39
	80 years & older	62.5%	0%	37.5%	8
By Education					
	Less than HS	52.0%	4.0%	44.0%	25
	HS grad	28.3%	10.0%	61.7%	60
	Some college	27.1%	8.3%	64.6%	192
	College grad	33.0%	8.7%	58.3%	321
	Post-grad study	35.8%	13.8%	50.3%	318
By Race/Ethnicity:					
	Hispanic/Latino	23.9%	8.7%	67.4%	92
	Asian/PI	24.1%	11.2%	64.7%	116
	African American/Black	23.5%	4.4%	72.1%	68
	White	36.7%	11.9%	51.4%	578
	Other	38.2%	5.5%	56.4%	55
By First Language:					
	English	34.6%	11.6%	53.8%	760
	Chinese	30.8%	3.8%	65.4%	52
	Spanish	28.8%	3.8%	67.3%	52
	Other	14.3%	4.8%	81.0%	42
By District:					
	District 1	25.9%	12.3%	61.7%	81
	District 2	36.8%	14.7%	48.5%	68
	District 3	27.9%	11.8%	60.3%	68
	District 4	27.3%	9.1%	63.6%	66
	District 5	45.8%	5.6%	48.6%	107
	District 6	23.3%	5.5%	71.2%	73
	District 7	23.5%	11.8%	64.7%	102
	District 8	40.4%	12.1%	47.5%	141
	District 9	37.6%	16.1%	46.2%	93
	District 10	27.4%	6.5%	66.1%	62
	District 11	36.7%	8.3%	55.0%	60
By Income:					
	Less than \$10,000	27.1%	3.4%	69.5%	59
	\$10,000 - \$19,999	32.9%	11.4%	55.7%	70
	\$20,000 - \$49,999	39.4%	8.3%	52.3%	216
	\$50,000 - \$74,999	30.2%	11.9%	57.9%	159
	\$75,000 - \$99,999	34.9%	11.4%	53.7%	149
	\$100,000 or more	28.8%	11.3%	60.0%	240
By Gender:					
	Female	35.0%	11.0%	54.0%	500
	Male	30.8%	9.4%	59.8%	413
By Political Ideology:					
	Very Liberal	42.2%	11.5%	46.3%	244
	Liberal	32.2%	9.6%	58.2%	366
	Moderate	25.6%	9.9%	64.5%	242
	Conservative	29.8%	12.8%	57.4%	47
	Very Conservative	25.0%	0%	75.0%	8
By Political Party:					
	Republican	26.9%	5.8%	67.3%	52
	Democrat	34.9%	9.2%	55.9%	598
	Independent	21.3%	16.3%	62.5%	160
	Something Else	42.6%	8.9%	48.5%	101

Q22. Satisfied with the Number of Candidates Allowed to Rank	Percent Satisfied	Sample N (totals)
(entries are row percentages)		
Total Sample (all voters surveyed)	94.3%	1323
By Age		
18-24 years	100.0%	70
25-29 years	94.0%	116
30-39 years	92.0%	275
40-49 years	94.4%	269
50-59 years	93.7%	269
60-69 years	94.4%	162
70-79 years	95.2%	105
80 years & older	98.0%	50
By Education		
Less than HS	86.1%	36
HS grad	93.9%	115
Some college	91.9%	285
College grad	94.2%	414
Post-grad study	96.7%	460
By Race/Ethnicity:		
Hispanic/Latino	92.2%	116
Asian/PI	96.1%	204
African American/Black	91.5%	82
White	95.1%	822
Other	87.1%	85
By First Language:		
English	94.5%	1057
Chinese	96.0%	100
Spanish	92.1%	63
Other	89.5%	86
By District:		
District 1	93.9%	115
District 2	95.5%	110
District 3	95.0%	101
District 4	96.0%	100
District 5	95.0%	141
District 6	92.5%	106
District 7	95.2%	147
District 8	96.1%	204
District 9	90.2%	112
District 10	92.4%	79
District 11	92.5%	80
By Income:		
Less than \$10,000	94.7%	75
\$10,000 - \$19,999	92.6%	95
\$20,000 - \$49,999	91.8%	306
\$50,000 - \$74,999	95.0%	261
\$75,000 - \$99,999	95.4%	195
\$100,000 or more	95.5%	352
By Gender:		
Female	96.0%	681
Male	92.8%	629
By Political Ideology:		
Very Liberal	91.6%	296
Liberal	96.3%	485
Moderate	94.0%	417
Conservative	95.7%	94
Very Conservative	76.9%	13
By Political Party:		
Republican	89.6%	106
Democrat	95.3%	813
Independent	92.6%	258
Something Else	94.9%	136

Q24. Ease of the Ranking Task		Very Easy (%)	Easy (%)	Neither (%)	Difficult (%)	Very Difficult (%)	Sample N
(entries are row percentages)							
Total Sample (all voters surveyed)		14.2%	32.0%	37.7%	13.5%	2.7	1236
By Age							
	18-24 years	6.0%	25.4%	55.2%	10.4%	3.0%	67
	25-29 years	10.6%	27.9%	43.3%	14.4%	3.8%	104
	30-39 years	8.4%	33.2%	40.0%	16.8%	1.6%	250
	40-49 years	16.9%	31.2%	35.0%	13.5%	3.5%	260
	50-59 years	15.3%	34.9%	36.9%	11.0%	2.0%	255
	60-69 years	19.1%	31.6%	34.9%	13.2%	1.3%	152
	70-79 years	18.4%	33.7%	31.6%	11.2%	5.1%	98
	80 years & older	19.0%	26.2%	28.6%	21.4%	4.8%	42
By Education							
	Less than HS	32.4%	35.1%	16.2%	10.8%	5.4%	37
	HS grad	14.2%	33.6%	41.6%	7.1%	3.5%	113
	Some college	14.1%	34.4%	38.9%	10.4%	2.2%	270
	College grad	13.2%	32.1%	38.6%	14.0%	2.1%	386
	Post-grad study	13.4%	29.4%	37.2%	17.2%	2.9%	419
By Race/Ethnicity:							
	Hispanic/Latino	16.8%	41.6%	30.1%	11.5%	0	113
	Asian/PI	8.5%	35.2%	45.2%	8.0%	3.0%	199
	African American/Black	13.6%	34.6%	33.3%	12.3%	6.2%	81
	White	15.0%	30.0%	36.7%	15.6%	2.7%	749
	Other	19.0%	24.1%	44.3%	11.4%	1.3%	79
By First Language:							
	English	13.7%	31.4%	37.9%	14.3%	2.8%	972
	Chinese	12.1%	35.4%	38.4%	10.1%	4.0%	99
	Spanish	23.0%	42.6%	26.2%	8.2%	0	61
	Other	15.1%	24.4%	45.3%	12.8%	2.3%	86
By District:							
	District 1	17.8%	31.8%	35.5%	11.2%	3.7%	107
	District 2	11.8%	26.5%	39.2%	15.7%	6.9%	102
	District 3	11.8%	31.2%	41.9%	14.0%	1.1%	93
	District 4	8.2%	34.7%	40.8%	12.2%	4.1%	98
	District 5	10.7%	31.1%	36.9%	18.9%	2.5%	122
	District 6	20.2%	30.3%	34.3%	13.1%	2.0%	99
	District 7	16.9%	30.3%	38.0%	11.3%	3.5%	142
	District 8	16.1%	32.3%	37.0%	14.1%	.5%	192
	District 9	15.5%	32.0%	38.1%	12.4%	2.1%	97
	District 10	9.0%	35.9%	37.2%	16.7%	1.3%	78
	District 11	14.6%	37.8%	39.0%	4.9%	3.7%	82
By Income:							
	Less than \$10,000	17.1%	37.1%	35.7%	10.0%	0	70
	\$10,000 - \$19,999	13.4%	30.9%	38.1%	15.5%	2.1%	97
	\$20,000 - \$49,999	13.9%	32.2%	41.8%	10.3%	1.8%	273
	\$50,000 - \$74,999	12.4%	29.0%	42.7%	12.9%	2.9%	241
	\$75,000 - \$99,999	17.4%	34.2%	31.6%	15.3%	1.6%	190
	\$100,000 or more	14.1%	30.6%	35.9%	15.3%	4.1%	320
By Gender:							
	Female	13.9%	30.3%	39.9%	13.6%	2.4%	627
	Male	14.6%	33.6%	35.3%	13.8%	2.7%	595
By Political Ideology:							
	Very Liberal	18.1%	31.0%	34.3%	14.4%	2.2%	271
	Liberal	13.2%	31.8%	38.2%	14.5%	2.3%	440
	Moderate	9.7%	33.4%	40.9%	12.7%	3.2%	401
	Conservative	20.7%	31.5%	34.8%	9.8%	3.3%	92
	Very Conservative	30.8%	23.1%	30.8%	15.4%	0	13
By Political Party:							
	Republican	20.2%	27.9%	35.6%	12.5%	3.8%	104
	Democrat	13.8%	33.3%	36.5%	13.7%	2.7%	747
	Independent	13.5%	31.0%	38.5%	14.3%	2.8%	252
	Something Else	12.9%	26.6%	45.2%	12.9%	2.4%	124

Q25. Overall Understanding of RCV		Perfectly Well (%)	Understood it Fairly Well (%)	Not Entirely (%)	Not at all (%)	Sample N
(entries are row percentages)						
Total Sample (all voters surveyed)		51.6%	35.6%	9.9%	3.0%	1633
By Age						
	18-24 years	46.2%	39.6%	9.9%	4.4%	91
	25-29 years	57.0%	32.4%	8.5%	2.1%	142
	30-39 years	48.7%	40.0%	9.0%	2.4%	335
	40-49 years	52.9%	33.8%	10.2%	3.1%	325
	50-59 years	51.6%	34.6%	10.3%	3.5%	341
	60-69 years	60.6%	26.6%	10.8%	2.0%	203
	70-79 years	46.0%	43.5%	8.1%	2.4%	124
	80 years & older	38.5%	40.0%	13.8%	7.7%	65
By Education						
	Less than HS	35.7%	40.5%	19.0%	4.8%	42
	HS grad	35.6%	49.6%	11.9%	3.0%	135
	Some college	42.8%	43.4%	11.0%	2.9%	346
	College grad	52.1%	34.6%	9.6%	3.8%	532
	Post-grad study	62.4%	27.6%	7.9%	2.2%	558
By Race/Ethnicity:						
	Hispanic/Latino	43.1%	46.7%	9.5%	.7%	137
	Asian/PI	31.5%	54.2%	12.2%	2.1%	238
	African American/Black	41.9%	41.9%	11.1%	5.1%	117
	White	58.7%	29.0%	9.0%	3.2%	1020
	Other	48.5%	37.6%	9.9%	4.0%	101
By First Language:						
	English	54.7%	33.2%	9.1%	3.0%	1321
	Chinese	28.9%	49.1%	17.5%	4.4%	114
	Spanish	46.3%	44.8%	9.0%	0	67
	Other	46.3%	39.8%	12.0%	1.9%	108
By District:						
	District 1	48.5%	39.0%	10.3%	2.2%	136
	District 2	55.6%	33.3%	9.8%	1.3%	153
	District 3	50.0%	35.7%	11.9%	2.4%	126
	District 4	48.0%	37.0%	13.4%	1.6%	127
	District 5	56.1%	31.2%	6.9%	5.8%	173
	District 6	47.5%	41.0%	6.6%	4.9%	122
	District 7	56.5%	32.2%	6.8%	4.5%	177
	District 8	59.1%	27.4%	11.1%	2.4%	252
	District 9	45.6%	40.8%	12.0%	1.6%	125
	District 10	31.1%	45.3%	17.0%	6.6%	106
	District 11	52.9%	40.2%	6.9%	0	102
By Income:						
	Less than \$10,000	37.9%	47.1%	12.6%	2.3%	87
	\$10,000 - \$19,999	41.9%	35.0%	17.9%	5.1%	117
	\$20,000 - \$49,999	44.3%	41.6%	10.3%	3.7%	377
	\$50,000 - \$74,999	51.4%	36.4%	9.0%	3.1%	321
	\$75,000 - \$99,999	54.6%	34.0%	9.7%	1.7%	238
	\$100,000 or more	62.4%	28.1%	7.4%	2.1%	420
By Gender:						
	Female	49.0%	37.3%	10.5%	3.2%	832
	Male	54.7%	33.5%	9.1%	2.7%	781
By Political Ideology:						
	Very Liberal	57.5%	28.7%	10.9%	2.9%	348
	Liberal	51.0%	37.4%	9.4%	2.2%	596
	Moderate	47.8%	39.0%	10.2%	2.9%	510
	Conservative	55.4%	29.8%	9.9%	5.0%	121
	Very Conservative	31.6%	57.9%	5.3%	5.3%	19
By Political Party:						
	Republican	54.8%	31.9%	8.9%	4.4%	135
	Democrat	48.3%	38.5%	10.4%	2.7%	989
	Independent	55.3%	29.7%	11.6%	3.4%	320
	Something Else	63.2%	30.1%	4.9%	1.8%	163

Q27. Prefer RCV or former Runoff		Prefer RCV (%)	No Difference (%)	Prefer Runoff (%)	Sample N
(entries are row percentages)					
Total Sample (all voters surveyed)		54.7%	28.2%	17.1%	1716
By Age					
	18-24 years	45.1%	42.2%	12.7%	102
	25-29 years	61.1%	30.9%	8.1%	149
	30-39 years	57.3%	30.5%	12.1%	354
	40-49 years	58.2%	27.0%	14.8%	352
	50-59 years	53.1%	28.3%	18.6%	339
	60-69 years	54.0%	19.4%	26.5%	211
	70-79 years	50.0%	27.3%	22.7%	132
	80 years & older	43.5%	23.2%	33.3%	69
By Education					
	Less than HS	42.9%	45.2%	11.9%	42
	HS grad	44.5%	33.6%	21.9%	137
	Some college	48.5%	34.0%	17.5%	359
	College grad	53.1%	31.8%	15.1%	569
	Post-grad study	63.5%	18.7%	17.8%	589
By Race/Ethnicity:					
	Hispanic/Latino	47.4%	40.1%	12.4%	137
	Asian/PI	50.6%	31.1%	18.3%	251
	African American/Black	32.2%	47.0%	20.9%	115
	White	59.0%	23.9%	17.1%	1087
	Other	54.3%	32.4%	13.3%	105
By First Language:					
	English	56.5%	26.0%	17.4%	1390
	Chinese	52.1%	32.5%	15.4%	117
	Spanish	43.1%	41.5%	15.4%	65
	Other	41.5%	41.5%	17.1%	123
By District:					
	District 1	53.2%	31.9%	14.9%	141
	District 2	54.0%	26.4%	19.5%	174
	District 3	49.2%	32.8%	18.0%	128
	District 4	52.9%	23.9%	23.2%	138
	District 5	62.8%	21.1%	16.1%	180
	District 6	53.2%	34.1%	12.7%	126
	District 7	54.0%	28.3%	17.6%	187
	District 8	60.2%	22.7%	17.0%	264
	District 9	61.1%	30.2%	8.7%	126
	District 10	35.1%	41.4%	23.4%	111
	District 11	60.0%	25.7%	14.3%	105
By Income:					
	Less than \$10,000	48.4%	41.9%	9.7%	93
	\$10,000 - \$19,999	54.8%	27.8%	17.5%	126
	\$20,000 - \$49,999	50.0%	34.1%	15.9%	378
	\$50,000 - \$74,999	53.4%	31.1%	15.5%	341
	\$75,000 - \$99,999	52.8%	23.4%	23.8%	252
	\$100,000 or more	63.1%	21.5%	15.5%	452
By Gender:					
	Female	52.6%	30.4%	17.0%	867
	Male	57.4%	25.6%	17.0%	828
By Political Ideology:					
	Very Liberal	63.8%	22.9%	13.3%	362
	Liberal	58.7%	27.8%	13.5%	637
	Moderate	49.8%	31.0%	19.2%	536
	Conservative	37.8%	32.3%	29.9%	127
	Very Conservative	33.3%	28.6%	38.1%	21
By Political Party:					
	Republican	36.4%	32.2%	31.5%	143
	Democrat	54.0%	29.3%	16.7%	1034
	Independent	56.7%	27.6%	15.7%	344
	Something Else	72.1%	19.2%	8.7%	172

Q28. Fairness of the Results under RCV		RCV more fair (%)	No Difference (%)	Runoff more fair (%)	Sample N
(entries are row percentages)					
Total Sample (all voters surveyed)		37.0%	48.1%	15.0%	1629
By Age					
	18-24 years	38.0%	55.0%	7.0%	100
	25-29 years	41.1%	50.0%	8.9%	146
	30-39 years	40.9%	49.4%	9.8%	328
	40-49 years	38.5%	47.6%	13.9%	330
	50-59 years	32.5%	51.6%	15.9%	320
	60-69 years	33.5%	42.9%	23.6%	203
	70-79 years	33.3%	46.0%	20.6%	126
	80 years & older	37.7%	31.9%	30.4%	69
By Education					
	Less than HS	35.9%	43.6%	20.5%	39
	HS grad	31.3%	51.9%	16.8%	131
	Some college	30.6%	53.9%	15.5%	343
	College grad	36.5%	50.1%	13.4%	543
	Post-grad study	42.5%	42.0%	15.5%	555
By Race/Ethnicity:					
	Hispanic/Latino	37.4%	49.6%	13.0%	131
	Asian/PI	33.3%	48.6%	18.1%	249
	African American/Black	23.1%	58.3%	18.5%	108
	White	39.1%	47.1%	13.8%	1021
	Other	39.8%	45.6%	14.6%	103
By First Language:					
	English	37.7%	47.9%	14.5%	1312
	Chinese	33.9%	48.7%	17.4%	115
	Spanish	33.9%	48.4%	17.7%	62
	Other	30.6%	52.1%	17.4%	121
By District:					
	District 1	30.1%	59.4%	10.5%	133
	District 2	29.9%	54.3%	15.9%	164
	District 3	42.4%	42.4%	15.3%	118
	District 4	36.4%	45.7%	17.8%	129
	District 5	45.7%	39.9%	14.5%	173
	District 6	40.8%	48.0%	11.2%	125
	District 7	32.8%	52.2%	15.0%	180
	District 8	40.4%	44.4%	15.2%	250
	District 9	47.5%	39.8%	12.7%	118
	District 10	24.8%	54.3%	21.0%	105
	District 11	38.6%	46.5%	14.9%	101
By Income:					
	Less than \$10,000	38.2%	48.3%	13.5%	89
	\$10,000 - \$19,999	35.9%	47.0%	17.1%	117
	\$20,000 - \$49,999	36.0%	51.6%	12.4%	364
	\$50,000 - \$74,999	36.7%	48.8%	14.5%	324
	\$75,000 - \$99,999	36.7%	47.7%	15.6%	237
	\$100,000 or more	39.0%	46.4%	14.6%	431
By Gender:					
	Female	36.9%	49.3%	13.8%	810
	Male	37.2%	47.1%	15.7%	801
By Political Ideology:					
	Very Liberal	50.1%	39.5%	10.3%	339
	Liberal	38.3%	49.5%	12.2%	606
	Moderate	31.6%	52.5%	15.9%	516
	Conservative	22.6%	48.4%	29.0%	124
	Very Conservative	19.0%	38.1%	42.9%	21
By Political Party:					
	Republican	24.6%	44.2%	31.2%	138
	Democrat	36.5%	49.5%	14.0%	972
	Independent	38.1%	47.1%	14.7%	333
	Something Else	48.8%	44.6%	6.5%	168