

**San Francisco and Instant Runoff Voting:
An Analysis of the SFSU/PRI Exit Poll Data
Assessing Voter Opinions about Ranked Choice Voting
in the November 2004 Board of Supervisors Elections**

Working Paper

by

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September 11, 2005

INTRODUCTION

As the movement for instant runoff voting (IRV) expands and gathers steam in California, Vermont, Michigan, and other states, it is important for both advocates and critics of this electoral reform to study whether IRV actually works in practice the way some have predicted it would based mainly on theory.

In the November 2, 2004 general election, San Francisco voters used IRV (known locally as ranked-choice voting, or RCV) to elect seven candidates to serve on the eleven-member Board of Supervisors, the legislative body for the consolidated City and County of San Francisco. In this paper, I test some of the predictions of IRV theory against the results of IRV practice based on an independent analysis of an exit poll designed to assess voter experience with this new way of voting.

Ranked-choice voting allows voters to rank candidates for a single office in order of preference (first choice, second choice, third, fourth, and so on. (In San Francisco, because of voting equipment and software limitations, voters are restricted to ranking only their top three choices.) If no candidate receives a majority of first choices, the one who received fewest first place votes is eliminated, and that candidate's votes are transferred to the remaining candidates according to each voter's preference-ordering indicated on the ballot. If a second round of counting still does not produce a majority, the cycle above is repeated until one of the candidates receives a clear majority of the active votes cast and is declared the winner. Unlike the old system, IRV avoids the necessity of a special runoff election when no candidate receives a majority in the first round. The Center for Voting and Democracy (www.fairvote.org) is the single most valuable source of information about IRV in the U.S. Also useful, Californians for Electoral Reform (www.cfer.org) tracks current electoral reform initiatives at the state and local level in California, and San Francisco's Department of Elections provides detailed information on how IRV is implemented in that city (http://www.sfgov.org/site/election_page.asp?id=24269).

Several key questions pose an acid test of pro-IRV claims. For example, compared to systems that require a special runoff election when no candidate wins a majority, does IRV really make it more likely that voters will vote for the candidates they most prefer rather than for candidates they don't much like but who seem more electable? Under IRV, are voters less likely to feel they have "wasted" their votes? Does IRV in fact encourage election campaigns that are more civil and less negative in tone? Is ranked-choice voting (RCV) under IRV really as easy as "1, 2, 3" as many advocates have claimed, or too difficult to

understand, as some critics have charged? Finally, based on their actual experience with both systems, would voters prefer to continue using ranked-choice ballots and IRV or to go back to using the more familiar method of special runoff elections?

Based on a careful study of San Francisco's recent experience with ranked-choice ballots and IRV, these kinds of questions can now be answered with hard empirical evidence. The findings strongly and unequivocally support most of the claims made by proponents of IRV. In short, at least in this one city, IRV works very well indeed. It lives up to its advance billing. And the city's voters prefer it overwhelmingly.

THE SFSU/PRI EXIT POLL

In the November 2, 2004 general election, San Francisco voters used ranked-choice ballots and instant runoff voting to elect seven district representatives to the city's eleven-member Board of Supervisors. Spanning a wide range of social, economic, and racial/ethnic diversity, these seven district elections put IRV to the test under extremely different circumstances and conditions. To assess voter experience using IRV, San Francisco State University's Public Research Institute (PRI) conducted an exit poll of precinct and absentee voters within all seven districts. The survey questionnaire (see Appendix B) asked voters a number of probing questions about their experience and perceptions using IRV. Their answers provide what I believe is the first solid empirical evidence of how IRV works in practice in a big U.S. city.

In May 2005, the PRI research team completed its study and released its final report, "An Assessment of Ranked-Choice Voting in the San Francisco 2004 Election: Final Report," which is available on PRI's website at: http://pri.sfsu.edu/reports/SFSU-PRI_RCV_final_report_June_30.pdf. This 75-page report provides an extremely valuable and richly detailed set of findings, some thoughtful and careful analyses, and full documentation of the survey instruments and methods used.

For purposes of my own study, however, PRI's final report had certain limitations. Most important, the principal findings were reported separately for the polling place and absentee voter samples. I was interested in obtaining an overall estimate of voter response based on a combined sample appropriately weighted to adjust for the fact that 37 percent of the seven-district electorate had voted absentee. Further, I wished to restrict analysis to just those voters who had personal experience using both voting methods, thus giving them grounds for making comparisons and choosing between them. Finally, I wanted an even more detailed breakdown and analysis of voter responses to question 23, a bottom-line question that asked respondents whether they preferred the new IRV system or the old December runoff system – or were indifferent between the two.

At my request, the principal investigators and authors of the report – Dr. Francis Neely, Ms. Lisel Blash, and Dr. Corey Cook – graciously made the raw data from their exit poll available to me for my independent analysis and interpretation. Although early on I served as a pro bono consultant to the PRI team on the design of the sample and questionnaire, I played no role in the conduct of the research itself or in the writing of the final report. The secondary analysis of the raw data that follows is entirely my own, and all comments and opinions about the results – and any errors of fact or interpretation – are also mine alone.

TECHNICAL NOTE ON SAMPLE DESIGN AND WEIGHTING

As documented in PRI's Final Report (pp. 1-2), two main sets of voters were surveyed in the exit poll: (1) a purposive sample of 2,847 polling place voters residing in one of the twenty-one precincts (three per district) selected to be most representative of district voter populations, and (2) a random mail sample survey of 1,167 absentee voters registered in one of the seven districts, which yielded a total of 217 completed absentee voter questionnaires. In the final report, as noted above, findings are reported separately for polling place voters and absentee voters

In my reanalysis of the raw data obtained from these two sets of voters, I restricted the sample to just those voters who (1) actually voted in the Board of Supervisors election (96.7% of the sample total) and

(2) indicated they had voted in at least one previous election. These restrictions produced a working sample of 2,483 polling place voters and 203 absentee voters. These 2,686 voters are of special interest because all had a basis in direct personal experience for making informed comparisons in deciding which method of voting they preferred.

In running my own statistical analyses on the original dataset, I used PRI's weighting variable (abswtcom) to adjust for (1) the variation in response rates of polling place voters across the seven districts and 21 precincts, and (2) the under representation of absentee voters in the total combined sample. I report both the weighted and unweighted sample sizes for all estimates in the tables that follow. Standard errors and confidence intervals, which assume a true probability sample rather than the purposive sample used here, are not reported. (Readers who want to see them anyway should contact me and I will send them robust standard errors for all reported estimates.) On this point see PRI's final report (pp. 9-10), which carefully qualifies its use of such inferential statistics and makes a strong case based on census data and other empirical evidence that their sample is broadly representative of the seven-district voter population.

To illustrate the result of using this weighting scheme on the combined sample data, I estimate that 67.6% of all non-first-time voters who voted for supervisor in November 2004 prefer IRV, and that 12.4% prefer the old December runoff (see Table 6 below). In PRI's final report, comparable estimates are 61% vs. 13% for polling place voters, and 77% vs. 11% for absentee voters. Both sets of estimates point to the same important conclusion: San Francisco voters, based on their experience with both, overwhelmingly prefer the new voting system to the old one. PRI's estimates also provide a useful comparison of polling place and absentee voter responses. **But if asked for my best overall estimate of San Francisco voter support for IRV, I would say: 67.6%, that is, more than two out of three. For purposes of summing up San Francisco's first experience with IRV, I think that is an important number.**

FINDINGS

I report the findings of my analysis of the PRI exit poll data in three sections. Part 1 (Tables 1 through 6) presents findings formulated as answers to some key questions raised in debates about ranked-choice ballots and instant runoff voting. Did San Franciscans understand ranked-choice voting, at least the way that method of voting was implemented in the November 2004 election? Did RCV require voters to gather more information about the candidates than in past elections? Did RCV allow voters to vote according to their true preferences more than in past elections? Did RCV make voters feel their votes were less "wasted" than in past elections? Did RCV reduce the level of perceived negativity and incivility in district election campaigns compared to past? Overall, If given a choice, would San Francisco's voters prefer the current IRV system to the old December runoffs, the old December runoffs to IRV, or no difference?

Part 2 (Tables 7A through 7V) presents a series of cross-tabulations breaking down exit poll voters' responses to Question 23 (prefer new RCV or old December runoffs?) by various socio-demographic group categories, including sex, race/ethnicity, age, sexual orientation, income, education, and so on, and also by various political groups, including political party, political ideology, etc.

Part 3 (Table 8) reports the results of a more rigorous multivariable analysis of voter responses to Question 23 using the statistical method of logistic regression.

PART 1: EXIT POLL ANSWERS TO KEY QUESTIONS ABOUT RCV

Question 1: Did San Francisco voters understand ranked-choice voting?

Table 1: LEVEL OF UNDERSTANDING OF RANKED-CHOICE VOTING: Estimated percentage responses to Question 18 from the combined and weighted sample of election-day and absentee non-first-time voters who said they voted in the Board of Supervisors election.

Question 18: *“Overall, how would you describe your experience with Ranked-Choice Voting for the Board of Supervisors: Understood it perfectly well, understood it fairly well, did not understand it entirely, or did not understand it at all?”*

| Response | Estimated Percent | |
|--------------------------------|-------------------|----------------------|
| Understood it perfectly well | 52.8% | |
| Understood it fairly well | 35.3% | |
| Did not understand it entirely | 9.7% | |
| Did not understand it at all | 2.2% | |
| | ----- | |
| Total: | 100.0% | |
| Weighted N: | 2654 | (Unweighted N: 2561) |

Answer: Yes. More than half the sample voters (52.8%) said they understood ranked-choice voting (RCV) “perfectly well,” and another 35.3% said they understood it “fairly well.” About 12% said they had at least some trouble understanding RCV, including only about 2% who said they did not understand it at all. (Unfortunately, the PRI exit poll did not include a question asking how well voters understood the old voting system and its mechanics, so there is no real baseline for expectations here.) See related findings in PRI’s final report indicating that San Francisco voters, on the whole, had a good understanding of RCV and little trouble figuring out how it worked in ranking candidates, casting ballots, and so on.

Question 2: Did RCV require voters to gather more information about candidates compared to past elections?

Table 2: INFORMATION-GATHERING BURDEN USING RCV: Estimated percentage responses to Question 19 from the combined and weighted sample of election-day and absentee non-first-time voters who said they voted in the Board of Supervisors election.

Question 19: *“Compared to past elections for the Board of Supervisors, how much information did you gather about the candidates before voting today: More than in past elections, no difference, less than in past elections?”*

| Response | Estimated Percent | |
|-----------------------------|-------------------|----------------------|
| More than in past elections | 30.8% | |
| No difference | 62.3% | |
| Less than in past elections | 6.9% | |
| | ----- | |
| Total: | 100.0% | |
| Weighted N: | 2610 | (Unweighted N: 2509) |

Answer: Yes, on net, with about 31% of sample voters saying they gathered more information than in the past and only about 7% saying less. The vast majority of voters, however, reported no difference. Whether the need to gather more information is a good or bad thing, however, is an open question. There is evidence, for example, that voters who gathered more information were much more pro-IRV than were those who gathered less (see Table 7A below).

Question 3: Did RCV increase the likelihood of voters voting for their most preferred candidate?

Table 3: LIKELIHOOD OF VOTING FOR MOST PREFERRED CANDIDATE UNDER RCV: Estimated percentage responses to Question 20 from the combined and weighted sample of election-day and absentee non-first-time voters who said they voted in the Board of Supervisors election.

Question 20: *“Sometimes people vote for their most preferred candidate, and sometimes they vote for a candidate because he or she is more likely to win. Compared to past elections for the Board of Supervisors, were you more or less likely to vote for your most preferred candidate today: More likely, no difference, less likely?”*

| Response | Estimated Percent | |
|---------------|-------------------|----------------------|
| More likely | 44.6% | |
| No difference | 52.8% | |
| Less likely | 2.7% | |
| | ----- | |
| Total: | 100.1% | |
| Weighted N: | 2616 | (Unweighted N: 2520) |

Answer: Yes, overwhelmingly. Nearly 45% of sample voters said they were more likely to vote for their most preferred candidate compared to past elections; only a tiny 3% said less likely. Once again, however, most voters (52.8%) said there was no difference.

Question 4: Did RCV reduce voter feelings that their votes were “wasted”?

Table 4: PERCEPTION OF WASTED VOTES UNDER RCV: Estimated percentage responses to Question 21 from the combined and weighted sample of election-day and absentee non-first-time voters who said they voted in the Board of Supervisors election.

Question 21: *“Sometimes voters feel like their vote is wasted, or doesn’t count for much in an election. What about you? Compared to past elections for the Board of Supervisors, which best describes you: Felt more like my vote was wasted this time, no difference, felt less like my vote was wasted this time?”*

| Response | Estimated Percent | |
|--------------------|-------------------|----------------------|
| More likely wasted | 6.7% | |
| No difference | 68.0% | |
| Less likely wasted | 25.3% | |
| | ----- | |
| Total: | 100.0% | |
| Weighted N: | 2615 | (Unweighted N: 2514) |

Answer: Yes, on net, with about one in four sample voters saying they felt less like their vote was wasted this time using RCV. Only about 7% said they felt more like their vote was wasted under RCV than under the old voting system. Nearly seven out of ten voters, however, felt there was no difference between the two systems in this regard.

Question 5: In the voters’ eyes, did RCV reduce the level of negative campaigning?

Table 5A: PERCEPTION OF NEGATIVE CAMPAIGNING UNDER RCV: Estimated percentage responses to Question 22 from the combined and weighted sample of election-day and absentee non-first-time voters who said they voted in the Board of Supervisors election.

Question 22: *“Thinking just about the campaign for the Board of Supervisors in your district, was it more or less negative than in past elections: More negative than past elections, no difference, less negative than past elections?”*

| Response | Estimated Percent | |
|---------------|-------------------|----------------------|
| More negative | 18.3% | |
| No difference | 62.6% | |
| Less negative | 19.1% | |
| | ----- | |
| Total: | 100.0% | |
| Weighted N: | 2602 | (Unweighted N: 2487) |

Answer: No, on the whole, at least in this particular election. About as many sample voters (18.3%) said campaigning in their district was actually more negative than in past elections as those who said it was less negative (19.1%). More than three out of five voters, however, observed no difference in the

level of negative campaigning. This is a disappointing finding for IRV advocates like me, but the chips fell that way. At least one local political observer has suggested that the campaigns run against incumbents in districts 1 and 11 were unprecedented in their viciousness and overall negativity, and that results for these two districts should be omitted from the calculations to yield a fairer, more accurate picture of RCV's overall civilizing effects. Table 5B below does just that, with results that are certainly (although not

Table 5B: PERCEPTION OF NEGATIVE CAMPAIGNING UNDER RCV – EXCLUDING SAMPLE VOTERS WHO RESIDE IN DISTRICT 1 OR DISTRICT 11

| Response | Estimated Percent | |
|---------------|-------------------|----------------------|
| More negative | 12.1% | |
| No difference | 65.6% | |
| Less negative | 22.4% | |
| | ----- | |
| Total: | 100.1% | |
| Weighted N: | 1908 | (Unweighted N: 1849) |

overwhelmingly) more favorable to this particular pro-IRV argument. However, I am not persuaded that the electoral negativity unleashed in the district 1 and 11 campaigns was exceptionally awful by historical standards, and I'm not inclined to bolster the evidence for a hypothesis by omitting precisely those cases that would most count against it.

Question 6: Bottom-line, when given a choice, did the city's voters prefer IRV to the old December runoff system?

Table 6: OVERALL PREFERENCE FOR NEW RCV SYSTEM VS. OLD RUNOFF SYSTEM: Estimated percentage responses to Question 23 from the combined and weighted sample of election-day and absentee non-first-time voters who said they voted in the Board of Supervisors election.

Question 23: "With the Ranked-Choice Voting system (Instant Runoff), there will be no run-off election held in December. Which would you say describes you best: I prefer this system with no December runoff election, no difference to me between this and the former system, I prefer the former system with a December runoff election?"

| Response | Estimated Percent | |
|-----------------------------------|-------------------|----------------------|
| Prefer new RCV to December runoff | 67.6% | |
| No difference | 20.0% | |
| Prefer old December runoff to RCV | 12.4% | |
| | ----- | |
| Total: | 100.0% | |
| Weighted N: | 2602 | (Unweighted N: 2504) |

Answer: Yes, overwhelmingly. Only 20% of sample voters saw no difference between the two systems, and of the 80% who did, those preferring the new RCV system outnumbered those preferring the old December runoff system by a ratio of more than five to one. If these are the only two options, RCV wins in a landslide, at least in San Francisco.

PART 2: BREAKDOWN OF RESPONSES TO QUESTION 23 (PREFER NEW RCV SYSTEM VS. PREFER OLD DECEMBER RUNOFF SYSTEM) BY GROUP.

Tables 7A through 7V below (24 tables total) break down voter responses to Question 23 (see Table 6 above) by the different group categories of a wide range of variables, such as race/ethnicity, sex, political party, and so on. **These breakdowns cumulatively support the claim that San Francisco voters of virtually every type and stripe – liberals and conservatives, Democrats and Republicans, whites and non-whites, men and women, young and old, rich and poor, and so on – prefer RCV to the old December runoff system.**

As summarized in Figure 1 and in Appendix A, voters in 74 of the 76 groups studied preferred RCV to the old runoff system. The only groups of voters who said they preferred the old December runoff to the new RCV system were those who reported they did not understand RCV at all (Question 18, N = 50) and those who reported that they had opposed RCV prior to voting in this election (Question 12, N = 171). In other words, based on this analysis of the PRI exit poll data, overall voter support for ranked-choice voting and IRV is replicated in virtually every politically-relevant group and subgroup and across the board.

In each table, the entries are group-specific estimates of % preferring the new RCV system, % preferring the old December runoff system, and the ratio of % new to % old. These estimates are taken from cross-tabulations of responses to Q23 by group categories as indicated and are based on the combined and weighted sample of election-day and absentee non-first-time voters who said they voted in the Board of Supervisors (BOS) election. Estimated % saying “no difference” can be computed as 100 – New – Old. Weighted and unweighted sample N’s are reported.

To illustrate how to interpret the table entries, see Table 7A below. As shown in Table 7A, an estimated 71% of the sample voters who gathered “more” information on the candidates said they preferred RCV; only 11% of them favored the old December runoff system. (By subtraction, 100 – 71 – 11 = 18% saw no

Table 7A: Support for RCV (vs. December runoff) by level of information gathering (Q19):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|-----------------------|------------|------------|------------------|-------|---------|
| 1 | Gathered MORE info | 71 | 11 | 6.5 | 790 | 824 |
| 2 | NO DIFFERENCE in info | 68 | 12 | 5.7 | 1584 | 1424 |
| 3 | Gathered LESS info | 52 | 21 | 2.5 | 178 | 201 |

difference between these new and old methods.) The ratio of the percent of voters in that group preferring RCV (71%) to the percent preferring the old system (11%) is 6.5. Notice that voters who gathered more information were much more inclined to favor RCV (71%) than were those who gathered less (52%) – a result some readers may find surprising, especially if they view information-gathering as a burden or cost of voting rather than as a benefit.

Table 7B: Support for RCV (vs. December runoff) by likelihood of voting for most preferred candidate (Q20):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|-------------------------------------|------------|------------|------------------|-------|---------|
| 4 | MORE LIKELY to vote most preferred | 71 | 13 | 5.5 | 1143 | 1130 |
| 5 | NO DIFFERENCE voting most preferred | 66 | 11 | 6.0 | 1347 | 1264 |
| 6 | LESS LIKELY to vote most preferred | 54 | 22 | 2.5 | 68 | 66 |

Table 7C: Support for RCV (vs. December runoff) by feeling vote was more or less wasted (Q21):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|------------------------------|------------|------------|------------------|-------|---------|
| 7 | Felt vote was MORE WASTED | 43 | 37 | 1.2 | 172 | 163 |
| 8 | NO DIFFERENCE in wasted vote | 65 | 12 | 5.4 | 1740 | 1601 |
| 9 | Felt vote was LESS WASTED | 80 | 8 | 10.0 | 646 | 692 |

Table 7D: Support for RCV (vs. December runoff) by perception that BOS campaign was more or less negative (Q22):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|------------------------------------|------------|------------|------------------|-------|---------|
| 10 | Felt campaign was MORE NEGATIVE | 67 | 15 | 4.5 | 459 | 383 |
| 11 | NO DIFFERENCE re negative campaign | 62 | 13 | 4.8 | 1604 | 1637 |
| 12 | Felt campaign was LESS NEGATIVE | 86 | 7 | 12.3 | 487 | 418 |

Table 7E: Support for RCV (vs. December runoff) by level of understanding of RCV (Q18):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|---------------------------------|------------|------------|------------------|-------|---------|
| 13 | Understood RCV PERFECTLY WELL | 76 | 10 | 7.6 | 1377 | 1316 |
| 14 | Understood RCV FAIRLY WELL | 63 | 12 | 5.3 | 907 | 846 |
| 15 | Did NOT understand RCV entirely | 43 | 20 | 2.2 | 243 | 259 |
| 16 | Did NOT understand RCV at all | 21 | 37 | 0.6 | 50 | 50 |

Table 7F: Support for RCV (vs. December runoff) by pre-election opinion of RCV (Q12):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|-----------------------------------|------------|------------|------------------|-------|---------|
| 17 | SUPPORTED RCV | 86 | 3 | 28.7 | 1112 | 1046 |
| 18 | NEITHER supported nor opposed RCV | 60 | 12 | 5.0 | 1266 | 1241 |
| 19 | OPPOSED RCV | 15 | 71 | 0.2 | 176 | 171 |

Table 7G: Support for RCV (vs. December runoff) by pre-election level of familiarity with RCV (Q11):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|------------------------------|------------|------------|------------------|-------|---------|
| 20 | VERY FAMILIAR with RCV | 72 | 13 | 5.5 | 514 | 557 |
| 21 | SOMEWHAT FAMILIAR with RCV | 69 | 13 | 5.3 | 981 | 954 |
| 22 | NOT VERY FAMILIAR with RCV | 68 | 10 | 6.8 | 649 | 558 |
| 23 | NOT AT ALL FAMILIAR with RCV | 58 | 15 | 3.9 | 441 | 425 |

Table 7H: Support for RCV (vs. December runoff) by perceived ease or difficulty of deciding first choice (Q13):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|--------------------------------------|------------|------------|------------------|-------|---------|
| 24 | VERY EASY deciding first choice | 70 | 15 | 4.7 | 858 | 790 |
| 25 | EASY deciding first choice | 67 | 10 | 6.7 | 728 | 735 |
| 26 | NEITHER difficult nor easy | 64 | 10 | 6.4 | 633 | 604 |
| 27 | DIFFICULT deciding first choice | 70 | 13 | 5.4 | 314 | 307 |
| 28 | VERY DIFFICULT deciding first choice | 58 | 27 | 2.1 | 69 | 68 |

Table 7I: Support for RCV (vs. December runoff) by perceived ease or difficulty of ranking top three preferred candidates (Q14):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|----------------------------------|------------|------------|------------------|-------|---------|
| 29 | VERY EASY ranking top three | 75 | 10 | 7.5 | 475 | 477 |
| 30 | EASY ranking top three | 72 | 5 | 14.4 | 743 | 789 |
| 31 | NEITHER difficult nor easy | 66 | 11 | 6.0 | 788 | 718 |
| 32 | DIFFICULT ranking top three | 61 | 22 | 2.8 | 453 | 404 |
| 33 | VERY DIFFICULT ranking top three | 46 | 42 | 1.1 | 106 | 86 |

Table 7J: Support for RCV (vs. December runoff) by attitude toward change (Q7):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|--------------------------------------|------------|------------|------------------|-------|---------|
| 34 | BETTER TO TRY NEW THINGS | 69 | 10 | 6.9 | 2073 | 1922 |
| 35 | BETTER TO STAY WITH TRADITIONAL WAYS | 64 | 19 | 3.4 | 272 | 198 |

Table 7K: Support for RCV (vs. December runoff) by political ideology (Q25):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|-------------------|------------|------------|------------------|-------|---------|
| 36 | VERY LIBERAL | 73 | 9 | 8.1 | 462 | 504 |
| 37 | LIBERAL | 67 | 12 | 5.6 | 1005 | 1040 |
| 38 | MODERATE | 68 | 13 | 5.2 | 860 | 710 |
| 39 | CONSERVATIVE | 65 | 15 | 4.3 | 189 | 173 |
| 40 | VERY CONSERVATIVE | 59 | 20 | 3.0 | 29 | 31 |

Table 7L: Support for RCV (vs. December runoff) by political party affiliation (Q26):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|----------------|------------|------------|------------------|-------|---------|
| 41 | REPUBLICAN | 67 | 15 | 4.5 | 276 | 229 |
| 42 | DEMOCRAT | 69 | 12 | 5.8 | 1634 | 1566 |
| 43 | INDEPENDENT | 69 | 9 | 7.7 | 446 | 424 |
| 44 | SOMETHING ELSE | 63 | 14 | 4.5 | 206 | 247 |

Table 7M: Support for RCV (vs. December runoff) by age group (Q1):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|------------|------------|------------|------------------|-------|---------|
| 45 | 18 to 29 | 60 | 12 | 5.0 | 408 | 507 |
| 46 | 30 to 59 | 70 | 11 | 6.4 | 1550 | 1648 |
| 47 | 60 years + | 67 | 16 | 4.2 | 625 | 340 |

Table 7N: Support for RCV (vs. December runoff) by racial/ethnic group (Q3):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|--------------------------|------------|------------|------------------|-------|---------|
| 48 | HISPANIC / LATINO | 52 | 15 | 3.5 | 153 | 228 |
| 49 | ASIAN / PACIFIC ISLANDER | 70 | 12 | 5.8 | 399 | 322 |
| 50 | AFRICAN AMERICAN / BLACK | 41 | 25 | 1.6 | 119 | 113 |
| 51 | WHITE | 70 | 11 | 6.4 | 1735 | 1662 |
| 52 | OTHER RACE/ETHNICITY | 69 | 8 | 8.6 | 159 | 150 |

Table 7O: Support for RCV (vs. December runoff) by sex (Q24):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|--------|------------|------------|------------------|-------|---------|
| 53 | FEMALE | 69 | 10 | 6.9 | 1452 | 1328 |
| 54 | MALE | 66 | 15 | 4.4 | 1133 | 1156 |

Table 7P: Support for RCV (vs. December runoff) by sexual orientation (Q27):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|----------|------------|------------|------------------|-------|---------|
| 55 | STRAIGHT | 68 | 12 | 5.7 | 2210 | 2128 |
| 56 | LGBT | 69 | 14 | 4.9 | 269 | 282 |

Table 7Q: Support for RCV (vs. December runoff) by first language (Q4):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|----------------------------|------------|------------|------------------|-------|---------|
| 57 | ENGLISH first language | 68 | 12 | 5.7 | 2207 | 2108 |
| 58 | NON-ENGLISH first language | 66 | 12 | 5.5 | 349 | 353 |

Table 7R: Support for RCV (vs. December runoff) by nativity (Q5):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|----------------------|------------|------------|------------------|-------|---------|
| 59 | NATIVE / BORN IN USA | 68 | 13 | 5.2 | 2201 | 2131 |
| 60 | FOREIGN BORN | 67 | 8 | 8.4 | 383 | 354 |

Table 7S: Support for RCV (vs. December runoff) by annual household income group (Q6):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|----------------------|------------|------------|------------------|-------|---------|
| 61 | LESS THAN \$20,000 | 54 | 11 | 4.9 | 304 | 295 |
| 62 | \$20,000 to \$74,999 | 71 | 10 | 7.1 | 1112 | 1095 |
| 63 | \$75,000 or more | 70 | 14 | 5.0 | 1075 | 1030 |

Table 7T: Support for RCV (vs. December runoff) by level of schooling (Q2):

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|---------------------|------------|------------|------------------|-------|---------|
| 64 | HIGH SCHOOL OR LESS | 58 | 8 | 7.3 | 200 | 166 |
| 65 | SOME COLLEGE | 64 | 10 | 6.4 | 541 | 541 |
| 66 | COLLEGE GRADUATE | 68 | 12 | 5.7 | 1010 | 984 |
| 67 | POST-GRADUATE | 72 | 15 | 4.8 | 818 | 788 |

Table 7U: Support for RCV (vs. December runoff) by voter status:

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|-------------------------------|------------|------------|------------------|-------|---------|
| 68 | PRECINCT (ELECTION-DAY) VOTER | 62 | 14 | 4.4 | 1555 | 2306 |
| 69 | ABSENTEE VOTER | 76 | 11 | 6.9 | 1047 | 198 |

Table 7V: Support for RCV (vs. December runoff) by BOS district of residence:

| ID | GROUP | Pct NEW | Pct OLD | New/Old Ratio | wtd N | unwtd N |
|----|-------------|------------|------------|------------------|-------|---------|
| 70 | DISTRICT 1 | 66 | 14 | 4.7 | 380 | 369 |
| 71 | DISTRICT 2 | 64 | 13 | 4.9 | 438 | 296 |
| 72 | DISTRICT 3 | 68 | 14 | 4.9 | 305 | 310 |
| 73 | DISTRICT 5 | 69 | 12 | 5.8 | 433 | 466 |
| 74 | DISTRICT 7 | 74 | 12 | 6.2 | 399 | 401 |
| 75 | DISTRICT 9 | 72 | 6 | 12.0 | 334 | 391 |
| 76 | DISTRICT 11 | 61 | 16 | 3.8 | 314 | 271 |

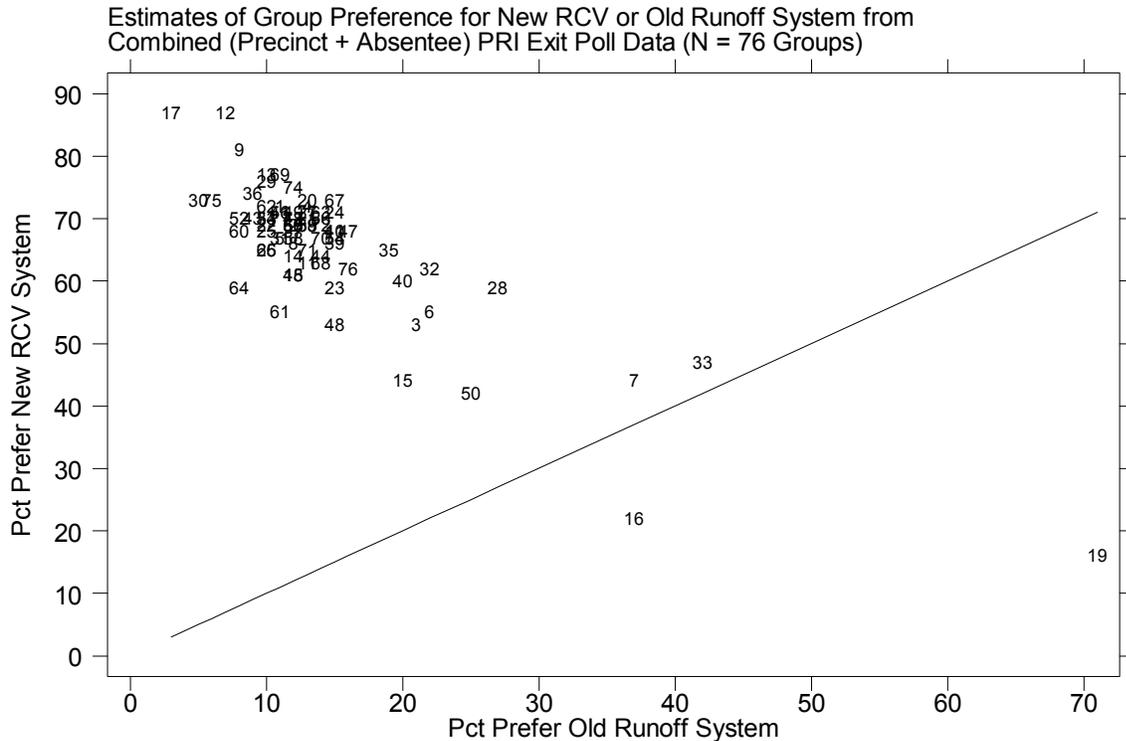


FIGURE 1: Scatter plot of group percent favoring new RCV system vs. group percent favoring old December runoff system. N = 76 groups (see Tables 7A-7V and/or Appendix A for description of groups by group ID). Among those who indicated a preference, sample voters in groups shown above the diagonal line of equality prefer RCV to the old runoff system; voters in groups shown below the line prefer the old runoff system to RCV.

PART 3: CORRELATES OF VOTER SUPPORT FOR RCV AND IRV: A MULTIVARIABLE LOGIT ANALYSIS OF EXIT POLL RESPONSES TO QUESTION 23.

The method of multivariable logistic regression makes it possible to identify what socio-demographic and political factors, if any, do or do not predict support for ranked-choice voting when statistically controlling for the effects of many other factors. Table 8 reports estimated odds ratios for four different logistic regression models. (An odds-ratio greater than 1.00 indicates that a predictor is positively correlated with support for RCV; an odds-ratio less than 1.00 indicates that a predictor is negatively correlated with support for RCV; and an odds-ratio of around 1.00 indicates no correlation, positive or negative.)

Model 1 estimates just the socio-demographic predictors of support for RCV, including sex, race/ethnicity, sexual orientation, first language, nativity, age, income, and education. Model 2 estimates just the political predictors of support for RCV, including whether the voter voted absentee or at the polling place, political party, political ideology (with the “conservative” label combining self-identified “conservative” and “very conservative” exit poll respondents to provide sufficient N for estimation), and BOS district of residence. Model 3 is the full model that includes all socio-demographic and political predictors, and Model 4 is a more parsimonious model that drops those variables from Model 3 which do not have a substantive correlation one way or the other with support for RCV under statistical controls.

Table 8: Socio-demographic and Political Correlates of Voter Support for Ranked-Choice Voting in San Francisco: Odds-Ratios Estimated from Multivariable Logistic Regression Analysis of PRI Exit Poll Data

| <u>Predictor</u> | <u>Reference Group</u> | <u>Model 1</u> | <u>Model 2</u> | <u>Model 3</u> | <u>Model 4</u> |
|--------------------------|------------------------|----------------|----------------|----------------|----------------|
| <i>Socio-demographic</i> | | | | | |
| Male | (Females) | .81** | -- | .85 | -- |
| Black | (Whites) | .34*** | -- | .35*** | .36*** |
| Asian/PI | (Whites) | 1.29 | -- | 1.20 | 1.22 |
| Latino | (Whites) | .51* | -- | .50* | .54* |
| Other Race | (Whites) | .87 | -- | .85 | .84 |
| Gay/Bi | (Straights) | .97 | -- | .85 | -- |
| Non-English | (English first) | .99 | -- | 1.11 | -- |
| Foreign Born | (Native) | 1.01 | -- | 1.01 | -- |
| Age 30-59 Yrs | (Age < 30 Yrs) | 1.52*** | -- | 1.43*** | 1.44*** |
| Age 60+ Yrs | (Age < 30 Yrs) | 1.62*** | -- | 1.27 | 1.29 |
| Income \$20-75K | (Income < \$20K) | 2.26** | -- | 2.37** | 2.29** |
| Income \$75K+ | (Income < \$20K) | 1.70*** | -- | 1.80*** | 1.68*** |
| Some College | (HS or less) | 1.37* | -- | 1.52** | 1.47** |
| College Graduate | (HS or less) | 1.59** | -- | 1.78*** | 1.74*** |
| Post-Graduate | (HS or less) | 1.86*** | -- | 2.03** | 2.05*** |
| <i>Political</i> | | | | | |
| Absentee voter | (Polling Place) | -- | 2.17*** | 2.01*** | 2.03*** |
| Republican | (Democrats) | -- | .85 | .72 | -- |
| Independent | (Democrats) | -- | 1.07 | 1.08 | -- |
| Other Party | (Democrats) | -- | .75 | .73 | -- |
| Very Liberal | (Moderates) | -- | 1.32 | 1.21 | -- |
| Liberal | (Moderates) | -- | 1.09 | .96 | -- |
| Conservative | (Moderates) | -- | .86 | .92 | -- |
| District 2 | (District 1) | -- | .99 | 1.00 | .99 |
| District 3 | (District 1) | -- | 1.33* | 1.44* | 1.41 |
| District 5 | (District 1) | -- | 1.13 | 1.39 | 1.39 |
| District 7 | (District 1) | -- | 1.67*** | 1.72*** | 1.65*** |
| District 9 | (District 1) | -- | 1.49** | 1.98*** | 1.95*** |
| District 11 | (District 1) | -- | .92 | 1.23 | 1.26 |
| Initial Log Likelihood | | -1368 | -1368 | -1368 | -1368 |
| Final Log Likelihood | | -1310 | -1324 | -1273 | -1281 |
| Pseudo-R-Sq | | .043 | .032 | .069 | .064 |
| Sample N | | 2207 | 2207 | 2207 | 2207 |

Note: The analysis was restricted to non-first-time voters who reported voting in the BOS election and for whom complete data was available for all predictors in the full model (Model 3). The general model tested was $\text{Prob}\{Y=1\} = 1/[1+\exp(-(\mathbf{B}\mathbf{X}))]$, where $\text{Prob}\{Y=1\}$ is the expected value of the probability of preferring the new RCV voting system versus old December runoff or no difference (Question 23), \exp is the base of the natural logarithm, \mathbf{X} is the vector of predictors scored as 0/1 dummy variables, and \mathbf{B} is the vector of regression coefficients estimated using maximum likelihood methods. All runs used sample weights adjusting for actual 7-district absentee voting rate and for variations in response rates across 21 precincts and 7 districts. Standard errors used in statistical significance tests were adjusted for clustering on precinct. See **Appendix C** for model fit coefficients for Model 4 results. **Caution:** The significance tests are meaningful only if the reader assumes that the purposive sample used here is broadly representative of the survey population and at least approximates the kind of probability sample required for such tests. Legend: * $p < .05$, ** $p < .01$, *** $p < .001$.

Source: Analysis of SFSU/PRI exit poll of San Francisco voters, November 2, 2004 general election.

Focusing on the odds ratios reported for Model 3 in Table 8, we can see that sex, sexual orientation, language, nativity, political party, and political ideology do not predict support for RCV under statistical controls. These variables were therefore dropped from the analysis that produced the results shown for Model 4.

Focusing on the odds ratios reported for Model 4, we can see, first of all, that **race/ethnicity** is correlated with support for RCV. Black voters were only about one-third as likely as white voters to support RCV (OR = .36), and Latino voters were about half as likely (OR = .54). Asian/PI voters were more likely than white voters to support RCV (OR = 1.22), and those of other race/ethnicity were somewhat less likely (OR = .84). Keep in mind, though, that exit poll respondents in all racial/ethnic groups preferred RCV to the old December runoffs, as reported earlier in Table 7N.

Second, regarding **age**, older voters were more likely to support RCV than were younger voters, particularly those in the 30 to 59 year old age group (OR = 1.44). But, again, as shown above in Table 7M, voters in all age groups overwhelmingly preferred RCV to the old runoffs.

Third, as regards **income**, higher income voters were more likely – about twice as likely -- to support RCV than were those of lower income. Yet as shown above in Table 7S, even in the lowest income group exit poll respondents favored RCV over December runoffs by nearly five to one.

Fourth, **absentee voters** were more than twice as likely as election-day polling place voters (OR = 2.03) to support RCV, although as Table 7U shows above, both types of voter overwhelmingly preferred RCV to December runoffs.

Fifth, regarding **BOS district** of residence, exit poll respondents who reside in District 7 or District 9 were more likely to support RCV than those in District 1. This particular result is interesting because District 7 is one of the most politically conservative districts in San Francisco, and District 9 one of the most politically progressive.

Finally, it is worth noting that the results shown for Model 3 with its large set of 28 predictors yielded a pseudo-R-squared of only .069. This so-called goodness of fit statistic is a very rough indicator of the proportion of variation in support for RCV that can be statistically explained by all 28 predictors taken together. Some applied statisticians might interpret the low .069 number as a failure of the model to explain or predict much. My own interpretation is that such a low value should be expected given that RCV commands broad support of voters in nearly all of the city's politically relevant groups.

CONCLUSIONS

On the whole, based on the detailed exit poll evidence presented here and in PRI's full report, IRV in San Francisco passed the test of actual political practice with flying colors. The city's voters clearly understood the system and the mechanics of how it works. They were much more likely to vote for their preferred candidate under the new IRV system than under the old December runoff system, and they were less likely, on net, to see their votes as wasted. On the other hand, there is little evidence in the exit poll data that IRV reduced the level of negativity in campaigning. And despite voter preference for IRV over the old runoff system in virtually every politically relevant group, the level of support for IRV varied considerably, ranging from lukewarm at best in a few groups to overwhelmingly positive in most others. Taking all these findings, variations, and qualifications into account, however, I think it is fair to conclude that this first experiment with IRV in a large American city was a resounding success.

APPENDIX A: SAMPLE GROUPS RANK-ORDERED FROM HIGH TO LOW ON RATIO OF FAVORING NEW RCV SYSTEM TO OLD DECEMBER RUNOFF SYSTEM.

| ID | GROUP | New | Old | Ratio | wtdN | unwtdN |
|----|--|-----|-----|-------|------|--------|
| 17 | Q12 Before voting, SUPPORTED RCV | 86 | 3 | 28.7 | 1112 | 1046 |
| 30 | Q14 EASY ranking top three | 72 | 5 | 14.4 | 743 | 789 |
| 12 | Q22 Felt BOS campaign was LESS NEGATIVE | 86 | 7 | 12.3 | 487 | 418 |
| 75 | BOS DISTRICT 9 | 72 | 6 | 12.0 | 334 | 391 |
| 9 | Q21 Felt vote was LESS WASTED | 80 | 8 | 10.0 | 646 | 692 |
| 52 | Q3 OTHER RACE/ETHNICITY | 69 | 8 | 8.6 | 159 | 150 |
| 60 | Q5 FOREIGN BORN | 67 | 8 | 8.4 | 383 | 354 |
| 36 | Q25 VERY LIBERAL on most political matters | 73 | 9 | 8.1 | 462 | 504 |
| 43 | Q26 Usually think of self as INDEPENDENT | 69 | 9 | 7.7 | 446 | 424 |
| 13 | Q18 Understood RCV PERFECTLY WELL | 76 | 10 | 7.6 | 1377 | 1316 |
| 29 | Q14 VERY EASY ranking top three | 75 | 10 | 7.5 | 475 | 477 |
| 64 | Q2 HIGH SCHOOL OR LESS | 58 | 8 | 7.3 | 200 | 166 |
| 62 | Q6 \$20,000 to \$74,999 household income | 71 | 10 | 7.1 | 1112 | 1095 |
| 69 | ABSENTEE VOTER | 76 | 11 | 6.9 | 1047 | 198 |
| 53 | Q24 FEMALE | 69 | 10 | 6.9 | 1452 | 1328 |
| 34 | Q7 BETTER TO TRY NEW THINGS | 69 | 10 | 6.9 | 2073 | 1922 |
| 22 | Q11 Before voting, NOT VERY FAMILIAR with RCV | 68 | 10 | 6.8 | 649 | 558 |
| 25 | Q13 EASY deciding first choice | 67 | 10 | 6.7 | 728 | 735 |
| 1 | Q19 Gathered MORE info | 71 | 11 | 6.5 | 790 | 824 |
| 65 | Q2 SOME COLLEGE | 64 | 10 | 6.4 | 541 | 541 |
| 26 | Q13 NEITHER DIFFICULT NOR EASY deciding first choice | 64 | 10 | 6.4 | 633 | 604 |
| 51 | Q3 WHITE | 70 | 11 | 6.4 | 1735 | 1662 |
| 46 | Q1 AGE GROUP 30 to 59 | 70 | 11 | 6.4 | 1550 | 1648 |
| 74 | BOS DISTRICT 7 | 74 | 12 | 6.2 | 399 | 401 |
| 5 | Q20 NO DIFFERENCE voting for most preferred | 66 | 11 | 6.0 | 1347 | 1264 |
| 31 | Q14 NEITHER DIFFICULT NOR EASY ranking top three | 66 | 11 | 6.0 | 788 | 718 |
| 49 | Q3 ASIAN / PACIFIC ISLANDER | 70 | 12 | 5.8 | 399 | 322 |
| 73 | BOS DISTRICT 5 | 69 | 12 | 5.8 | 433 | 466 |
| 42 | Q26 Usually think of self as DEMOCRAT | 69 | 12 | 5.8 | 1634 | 1566 |
| 2 | Q19 NO DIFFERENCE in info | 68 | 12 | 5.7 | 1584 | 1424 |
| 57 | Q4 ENGLISH first language | 68 | 12 | 5.7 | 2207 | 2108 |
| 55 | Q27 STRAIGHT | 68 | 12 | 5.7 | 2210 | 2128 |
| 66 | Q3 COLLEGE GRADUATE | 68 | 12 | 5.7 | 1010 | 984 |
| 37 | Q25 LIBERAL on most political matters | 67 | 12 | 5.6 | 1005 | 1040 |
| 20 | Q11 Before voting, VERY FAMILIAR with RCV | 72 | 13 | 5.5 | 514 | 557 |
| 58 | Q4 NON-ENGLISH first language | 66 | 12 | 5.5 | 349 | 353 |
| 4 | Q20 MORE LIKELY to vote for most preferred | 71 | 13 | 5.5 | 1143 | 1130 |
| 8 | Q21 NO DIFFERENCE in wasted vote | 65 | 12 | 5.4 | 1740 | 1601 |
| 27 | Q13 DIFFICULT deciding first choice | 70 | 13 | 5.4 | 314 | 307 |
| 21 | Q11 Before voting, SOMEWHAT FAMILIAR with RCV | 69 | 13 | 5.3 | 981 | 954 |
| 14 | Q18 Understood RCV FAIRLY WELL | 63 | 12 | 5.3 | 907 | 846 |
| 38 | Q25 MODERATE on most political matters | 68 | 13 | 5.2 | 860 | 710 |
| 59 | Q5 NATIVE / BORN IN USA | 68 | 13 | 5.2 | 2201 | 2131 |
| 63 | Q6 \$75,000 or more household income | 70 | 14 | 5.0 | 1075 | 1030 |
| 45 | Q1 AGE GROUP 18 to 29 | 60 | 12 | 5.0 | 408 | 507 |
| 18 | Q12 Before voting, neither supported or opposed RCV | 60 | 12 | 5.0 | 1266 | 1241 |
| 56 | Q27 LGBT | 69 | 14 | 4.9 | 269 | 282 |
| 71 | BOS DISTRICT 2 | 64 | 13 | 4.9 | 438 | 296 |
| 61 | Q6 LESS THAN \$20,000 household income | 54 | 11 | 4.9 | 304 | 295 |
| 72 | BOS DISTRICT 3 | 68 | 14 | 4.9 | 305 | 310 |
| 67 | Q3 POST-GRADUATE | 72 | 15 | 4.8 | 818 | 788 |
| 11 | Q22 NO DIFFERENCE re negative campaign | 62 | 13 | 4.8 | 1604 | 1637 |
| 70 | BOS DISTRICT 1 | 66 | 14 | 4.7 | 380 | 369 |
| 24 | Q13 VERY EASY deciding first choice | 70 | 15 | 4.7 | 858 | 790 |
| 44 | Q26 Usually think of self as SOMETHING ELSE | 63 | 14 | 4.5 | 206 | 247 |
| 10 | Q22 Felt BOS campaign was MORE NEGATIVE | 67 | 15 | 4.5 | 459 | 383 |
| 41 | Q26 Usually think of self as REPUBLICAN | 67 | 15 | 4.5 | 276 | 229 |
| 68 | PRECINCT (ELECTION DAY) VOTER | 62 | 14 | 4.4 | 1555 | 2306 |
| 54 | Q24 MALE | 66 | 15 | 4.4 | 1133 | 1156 |
| 39 | Q25 CONSERVATIVE on most political matters | 65 | 15 | 4.3 | 189 | 173 |
| 47 | Q1 AGE GROUP 60 years or older | 67 | 16 | 4.2 | 625 | 340 |
| 23 | Q11 Before voting, NOT AT ALL FAMILIAR with RCV | 58 | 15 | 3.9 | 441 | 425 |
| 76 | BOS DISTRICT 11 | 61 | 16 | 3.8 | 314 | 271 |
| 48 | Q3 HISPANIC / LATINO | 52 | 15 | 3.5 | 153 | 228 |
| 35 | Q7 BETTER TO STAY WITH TRADITIONAL WAYS | 64 | 19 | 3.4 | 272 | 198 |

| | | | | | | |
|----|---|----|----|-----|-----|-----|
| 40 | Q25 VERY CONSERVATIVE on most political matters | 59 | 20 | 3.0 | 29 | 31 |
| 32 | Q14 DIFFICULT ranking top three | 61 | 22 | 2.8 | 453 | 404 |
| 3 | Q19 Gathered LESS info | 52 | 21 | 2.5 | 178 | 201 |
| 6 | Q20 LESS LIKELY to vote for most preferred | 54 | 22 | 2.5 | 68 | 66 |
| 15 | Q18 Did NOT understand RCV entirely | 43 | 20 | 2.2 | 243 | 259 |
| 28 | Q13 VERY DIFFICULT deciding first choice | 58 | 27 | 2.1 | 69 | 68 |
| 50 | Q3 AFRICAN AMERICAN / BLACK | 41 | 25 | 1.6 | 119 | 113 |
| 7 | Q21 Felt vote was MORE WASTED | 43 | 37 | 1.2 | 172 | 163 |
| 33 | Q14 VERY DIFFICULT ranking top three | 46 | 42 | 1.1 | 106 | 86 |
| 16 | Q18 Did NOT understand RCV at all | 21 | 37 | 0.6 | 50 | 50 |
| 19 | Q12 Before voting, OPPOSED RCV | 15 | 71 | 0.2 | 176 | 171 |

APPENDIX B

Survey Questionnaire



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

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

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

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

如果你需要中文版問卷，請向調查員索取。

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

1. What is your age?

- 18-24 40-49 70-79
- 25-29 50-59 79 & 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. Were you born in the U.S.?

- Yes No

6. 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

7. Which comes closer to your view?

- It's better to try new things than to stay with the traditional ways of doing things
- It's better to stay with the traditional ways of doing things than to change

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

- Never before this time
- Occasionally
- Usually
- Always

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

- Yes No

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

- SF Dept. of Elections literature and/or website
- Candidate campaign literature and/or website
- Other literature or website/internet
- Presentation at club or organization
- Newspaper
- Television
- Radio
- Precinct worker
- Family, friends or neighbors
- Other

11. 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

12. 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

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

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

- I didn't vote for the Board of Supervisors (Please skip to Question 22)

PLEASE TURN THE QUESTIONNAIRE OVER

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

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

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

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

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

- Yes
- No

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

- Yes
- No

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

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

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

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

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

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

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

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

- More likely
- No difference
- Less likely

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

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

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

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

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

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

24. What is your gender?

- Female
- Male

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

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

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

- Republican
- Democrat
- Independent
- Something else

27. What is your sexual orientation?

- Straight
- Gay/Lesbian/Bisexual

Please fold your questionnaire and put it in the box.

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

Thank you!

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

APPENDIX C: MODEL FIT COEFFICIENTS FOR MODEL 4 ODDS RATIOS REPORTED IN TABLE 8 OF TEXT

logit q23new hispdum apidum blackdum othradum age3059 age60p1 inc2075 inc75p1 somecoll collgrad
 postgrad absentee dist2d dist3d dist5d dist7d dist9d dist11d if VotedB==1 & first !=1 & yhat4 !=.
 [pw=abswtcom], cluster(precinct)

(sum of wgt is 2.2443e+03)
 Iteration 0: log pseudolikelihood = -1367.8776
 Iteration 1: log pseudolikelihood = -1282.0663
 Iteration 2: log pseudolikelihood = -1280.9172
 Iteration 3: log pseudolikelihood = -1280.9163

Logit estimates Number of obs = 2207
Wald chi2(17) = .
Prob > chi2 = .
 Log pseudolikelihood = -1280.9163 Pseudo R2 = 0.0636

(standard errors adjusted for clustering on precinct)

| q23new | Coef. | Robust Std. Err. | z | P> z | [95% Conf. Interval] | |
|-----------|-----------|------------------|-------|-------|----------------------|-----------|
| hispdum | -.617445 | .3029737 | -2.04 | 0.042 | -1.211262 | -.0236275 |
| apidum | .1950846 | .1155445 | 1.69 | 0.091 | -.0313784 | .4215477 |
| blackdum | -1.014452 | .1839473 | -5.51 | 0.000 | -1.374982 | -.6539217 |
| othradum | -.1731782 | .244256 | -0.71 | 0.478 | -.6519112 | .3055547 |
| age3059 | .3620219 | .0939655 | 3.85 | 0.000 | .1778528 | .5461909 |
| age60p1 | .2531934 | .1472053 | 1.72 | 0.085 | -.0353236 | .5417104 |
| inc2075 | .8291448 | .2953826 | 2.81 | 0.005 | .2502055 | 1.408084 |
| inc75p1 | .519522 | .1273417 | 4.08 | 0.000 | .2699369 | .7691071 |
| somecoll | .3839735 | .1397908 | 2.75 | 0.006 | .1099886 | .6579585 |
| collgrad | .5567494 | .1298143 | 4.29 | 0.000 | .3023181 | .8111807 |
| postgrad | .7174452 | .1781296 | 4.03 | 0.000 | .3683177 | 1.066573 |
| absentee | .709371 | .057903 | 12.25 | 0.000 | .5958831 | .8228589 |
| dist2dum | -.0140229 | .2635306 | -0.05 | 0.958 | -.5305334 | .5024876 |
| dist3dum | .344857 | .1820763 | 1.89 | 0.058 | -.0120061 | .7017201 |
| dist5dum | .3206378 | .2214285 | 1.45 | 0.148 | -.1133542 | .7546297 |
| dist7dum | .5006157 | .1249749 | 4.01 | 0.000 | .2556695 | .745562 |
| dist9dum | .6700431 | .1445079 | 4.64 | 0.000 | .3868127 | .9532735 |
| dist11dum | .2276091 | .1708746 | 1.33 | 0.183 | -.107299 | .5625172 |
| _cons | -1.041749 | .1814537 | -5.74 | 0.000 | -1.397391 | -.6861059 |