CITY AND COUNTY OF SAN FRANCISCO

DEPARTMENT OF ELECTIONS
JOHN ARNTZ
Director

Implementation of Ranked-Choice Voting
The City and County of San Francisco
November 2, 2004 Municipal Election

In March 2002, the voters of the City and County of San Francisco ("the City") adopted ranked-choice voting (RCV), also known as "instant run-off voting" as an amendment to the City's Charter, which allows San Francisco's voters to elect a majority winner by ranking candidates rather than holding possible run-off elections to fill most of the City's local offices. The Charter amendment sought to have RCV implemented for the election conducted on November 4, 2002. However, if an RCV voting system could not be developed in time for 2002, the amendment allowed for the Department of Elections ("the Department") to implement RCV contests for the November 2003 General Municipal Election.

At the time the Charter amendment to implement RCV in San Francisco was adopted, none of the voting systems certified for use in California were certified for RCV contests. The vendor, ES&S, initially was uncertain on how to approach the RCV requirement. The cost of developing an RCV system was a concern for both the City and ES&S. Also, no other voting system in the United States accommodated ranked-choice voting as required by San Francisco's Charter. The City and its vendor would have to develop a system for certification without the benefit of examples on how to proceed.

Beginning in April 2002, the City and ES&S began discussions on how to meet the new Charter mandate. The discussions involved not only how to implement an RCV voting system, but how to properly modify an existing contract that did not contemplate RCV. The uncertainty on how to best proceed in the development, certification, and implementation of an RCV system lengthened the amount of time required to modify and finalize the parties' agreement. During the initial discussions, ES&S considered the best approach was for the City to move to touch-screen voting systems, although there was no funding or widespread support to move away from the City's paper ballot voting system. Once it became clear that the City would continue to use its optical scan system, the discussions focused on financial aspects of implementing RCV, and, even more critically, the timeframe in which the implementation would take place.

ES&S realized that its current paper ballot system could not provide voters the opportunity to rank all candidates that qualified for the ballot. For instance, if 22 candidates qualified for one contest, the system could not accommodate voters making 22 selections in order of their preference among the candidates. Touch-screen systems could most likely accommodate the ranking of all candidates. For absentee voting, however, the formatting for the paper ballots for the current optical scan system limits the number of choices. The RCV Charter amendment allows for voters to have no less than three selections for an RCV contest if it is not technically feasible for the system to allow for voters to rank all of the candidates on the ballot. Thus, the City agreed to have its system modified to allow voters three rankings among the qualified candidates appearing on the RCV ballot.

Voice (415) 554-4375 | 1 Dr. Carlton B. Goodlett Place, Room 48 | Absentee Fax (415) 554-4372
Fax (415) 554-7344 | San Francisco CA 94102-4634 | TDD (415) 554-4386

It was clear, given the timeframe and amount of development and testing necessary, that ES&S would be unable to develop and certify a system to meet the November 2003 Charter deadline to implement RCV in San Francisco. The Department developed its own RCV system that combined the hand counting of RCV ballots with off-the-shelf software to tabulate RCV results. The City sought to have its system certified through the Voting Systems and Procedures Panel (VSPP). The VSPP did not grant certification for the Department's approach to hand-count a citywide RCV contest for Mayor. Among the concerns of the VSPP members was the complexity of tabulating and accurately tracking voters' selections during the process of eliminating candidates from the contest and reallocating votes to the remaining candidates.

Once it was evident that the City would not have a certified RCV system in place for the Department to conduct a machine count RCV contest in November 2003, the Center for Voting and Democracy brought a lawsuit against the City to compel a hand count of the RCV ballots. The Superior Court dismissed the lawsuit declining to compel the city to use a non-certified method for counting RCV ballots, and the Court agreed that the City and Department would need to hold a run-off election should no candidate receive a clear majority of votes. In December 2003, the City did hold a run-off election to elect its mayor.

In November 2004, San Francisco implemented its new RCV method for the first time. Despite the challenges, the election was successful by most measures considering the implementation happened during a presidential election when more voters cast ballots in San Francisco, notably since 1952. The Department's outreach efforts in concert with its partnerships with community-based organizations sufficiently instructed voters on how to mark the RCV ballot and provided information to voters on understanding their new voting method. The voting system operated as required although it did require some unexpected updates to its tabulation software.

The report that follows describes the implementation of ranked-choice voting, from system modification through its application in the November 2004 Election, with a focus on the effectiveness of the ranked-choice components and the tabulation of results. *Section I* discusses the necessary modifications to the City's current voting system and the testing and certification process that followed. *Section II* discusses how the Department planned for and implemented ranked-choice voting, including community outreach and education and pollworker training, and system testing prior to Election Day. *Section III* discusses Election Day, including polling place activities, ballot processing, and the accumulation and reporting of results. *Section IV* suggests improvements to the system.

I. System Modification and Certification

A. Modifications to the Optical Scan Voting System (ES&S)

To accommodate ranked-choice voting, ES&S modified the hardware, firmware, and software of the system the City had used since November 2000. Since ES&S modified the City's voting system, ES&S needed to update the operating procedures specific to the City's system to include those procedures specific to RCV. Additionally, the VSPP required as a condition of its certification that that any detailed audit logs be updated to reflect procedural changes due to RCV and to produce the necessary higher-level reports. The City's Charter was

silent in regards to the resolution of tie votes for candidates with the least number of votes. To address this situation, the City developed procedures based on current Elections Code statutes that are based on deciding ties between candidates with the most votes.

Of the modifications to the City's voting system, among the most important were the addition of a new electronic memory device, modifications to the system's software, and a new ballot design.

PC memory card. The PC memory card is a secondary and removable data storage device installed in the Optech III-P Eagle machines located at each polling place. This device captures first, second and third-choice data from ballots via the use of a "Ballot Image File". The Ballot Image file contains data, not actual images of each ballot, on the selections made for each contest from each ballot; it does not contain any tabulated data.

Changes to tabulation software. The tabulation software that San Francisco uses was modified to compile ballot images (data) from the Eagle machine memory packs and PC cards with the ballot images (data) recorded by the Optech IV-C absentee ballot readers. The Results Accumulation Network compiles this data into a single set of files. Another module of the Results Accumulation Network, called the RCV Algorithm, iteratively processes the data from the ballot images to produce a report that shows the winner of a contest.

The ranked-choice voting ballot. The language of the San Francisco Charter that incorporates RCV states that a voter must be able to rank all candidates who have qualified to run for any particular office, but if the technology does not make this feasible, the voter must be able to rank at least three candidates for any one contest. Due to the current design of the optical scan ballot voting system provided by the City's vendor, the maximum number of candidates the system provides is three. Coding was incorporated into the top barcode of the RCV ballot that communicated with the PC memory card telling the card which ballot card contained the RCV contest. The design of the separate RCV ballot also made voter education more manageable and alleviated voter confusion when considering the difference in marking the RCV contest.

RCV contests were placed on a separate ballot card from other ballot issues as the ballot had to accommodate the ability for the voter to rank up to three choices. Under the header for the contest, the voter would see three columns of the names of all qualified candidates, including a space for a write-in candidate. Column one was for the voters "First-choice", column two was for the voter's "Second choice", and column three was for the voter's "Third choice". The voter could choose to make up to three selections, marking one candidate name in each column, including the write-in contest. The voter could also choose to leave any column blank, marking less than three choices and their ballot would still be counted.

B. Certification

After the November 2003 election, ES&S was able to begin the certification process for Optech IIIP Eagles modified to capture RCV information at the precinct level, and for the IV-C card readers for scanning absentee ballot cards. The initial step in the certification process was to gain approval of a federally sanctioned testing laboratory. The first laboratory to review the modified voting system did not issue a favorable report. ES&S considered this first review to be incomplete and inconclusive and had a second testing laboratory review the system. The second lab issued a favorable report, which was more thorough and explained more clearly what the laboratory tested and the results of those tests. Staff from the Secretary of State's office traveled to an ES&S facility in Rockford, Illinois to observe the operation of the modified system. The purpose of these observations was to ensure that votes were properly captured and tabulated. Afterwards, the Secretary of State staff issued a report to the VSPP recommending certification for the modified optical scan system.

On April 30, 2004, the Voting Systems and Procedures Panel (VSPP) conditionally granted ES&S' modified optical scan system for use in RCV contests conducted in conjunction with the November 2004 election. The conditions included ES&S creating an audit log for the manual entry of write-in votes, the City developing a process to resolve ties for candidates who did not receive the most votes, the City implementing a voter education program, and a requirement for the Secretary of State's office to have observers present for the election.

II. Implementation of Ranked-Choice Voting

A. Outreach and Education

The San Francisco Board of Supervisors directed the Department to organize a grant program in order to educate voters on the City's new voting method. The program was designed to provide funding to community organizations that would work in partnership with the Department of Elections to educate the voters of San Francisco. The total funding for outreach and education was $776,000, with $210,000 specifically allotted to the community organizations for their efforts. Over a three-month period, the Department's Outreach Division along with 11 community-based organizations (CBOs) organized an outreach strategy covering the Supervisorial Districts that would be voting for a member of the Board of Supervisors using RCV for the first time. All RCV materials were translated in Spanish, Chinese, Tagolog, Russian, and Vietnamese to assist those with limited English-language proficiency. The Department's outreach and education plan also devoted efforts to other groups such as the disabled, elderly, and first-time voters. Voter education emphasized ballot layout design, proper marking of RCV ballot contests, application of the RCV algorithm to eliminate candidates and transfer votes, and the affect of overvoting or undervoting a ballot contest.

In addition to over 700 outreach events, the Department created the following materials: •public service announcements •newspaper advertisements •ads placed in the interiors and exteriors of buses with routes in RCV districts •brochures placed throughout the City •material in the voter information pamphlet •a citywide educational mailer •educational materials sent to the absentee voters along with their ballot •educational DVDs •glossary of "conversational" terminology providing the pollworkers and translators additional communication tools •an interactive internet site allowing voters to mark a sample RCV ballot

card, and many other educational materials available on the Department's web site. The Department also created an instruction sheet for voters that was distributed to each RCV precinct and placed on or near the voting machine that explained ballot condition messages from the Eagle machine the voters would see if they marked their ballot in a way as to generate an "undervote" or "overvote" message. This sheet was provided in multiple languages to assist those with limited English language proficiency and to allow for minimum pollworker interaction to ensure ballot integrity.

B. Pollworker/Field Election Deputy Training

Educating and training the pollworkers and Field Election Deputies was as important as educating the voters. The Department mailed materials to the pollworkers that provided a written introduction to RCV, a sample RCV ballot, and a Supervisorial District map showing which Districts would vote an RCV contest in the November election. The pollworkers' training classes were extended an additional hour to provide more comprehensive and hands-on training for RCV. The Department offered 150 training classes that began with an RCV video showing ballot marking and tabulation of an RCV contest, and incorporated role-playing to teach pollworkers the manner voters could mark an RCV ballot. The training also included instruction on the operation of the Eagle voting machine, changing Eagle tapes, answers to potential voter questions, and an update to the procedure for closing the polls. The Department offered each pollworker and translator a video or DVD (multilingual) on ranked-choice voting to take home to review. The Department also offered each pollworker a multilingual glossary of "conversational" RCV terminology to further assist communication with voters.

At the end of their training sessions, Pollworkers were tested to determine their level of comprehension of ranked-choice voting; 90% of the students demonstrated a strong comprehension. As a part of the polling place supplies, the Department included extra signage and brochures for the pollworkers to place in their polling place and inside the voting booths. To further assist voters, the Department also assigned an extra pollworker, high school student, and/or translator to the RCV precincts.

In every election the Department employs highly trained personnel, Field Election Deputies (FEDs), who provide individualized support to no more than 15 polling places. The FEDs are assigned to specified precincts on election day to handle any situation where the precinct Inspector requires assistance. In addition to hiring extra pollworkers and translators for the precincts, the Department also hired additional FEDs for the November 2004 election. FEDs underwent the same training classes as the pollworkers as well as additional training that included minor maintenance on the Eagle machines, for a combined total of 10-hours of training. FEDs carried extra ballot supplies, signs and other materials, including RCV specific materials, should any of their assigned polling places require assistance. They were also instructed to observe the pollworkers in their assigned areas to ensure the pollworkers followed their training regarding RCV and provided consistent voter assistance.

C. Testing

The Department first planned to modify its usual approach writing Logic and Accuracy (L&A) scripts to also test the system's entire RCV capabilities. Later, the Department decided to expand testing with a second phase focusing on the accumulation and reporting of RCV results. The first phase was designed to treat RCV votes as separate contests that allowed the Department to use the same logic as used on the other ballots voters would cast. The scripts were created to simulate up to 21 ballot marking scenarios including ballot anomalies. The L&A testing for the RCV contests were conducted separately from the other contests to make sure that any possible errors that might occur could be clearly linked to the RCV contest. The second phase of the testing allowed the Department to determine some of the limitations of the RCV system, which were subsequently rectified by the vendor. One example was the limitation of the elimination rounds when the RCV algorithm was applied, which was initially set at 18 rounds and was subsequently removed (see section on reporting results).

After L&A testing, but prior to delivering Eagle voting machines to the polling places, the Department also performed its own "drop test" to ensure the Eagles would work properly after they were loaded into trucks, transported, and then unloaded at the polling places. The Department's concern was that the movement of the Eagles might loosen the PC memory cards from their connections. The drop tests proved the machines most likely could be moved without dislodging the PC cards. Still, once each Eagle was delivered to a polling site, Departmental staff started each Eagle to ensure the machines worked properly.

As for all elections, the final test of the a voting system occurs during the one percent manual tally. One condition to the system's certification was for the Department to use RCV ballot cards voted from randomly selected precincts. The manual review and comparison of the votes on these cards to the preliminary statement of vote indicated the City's voting system properly captured RCV votes. Further, the Department actually ran the RCV tabulation algorithm using the votes from these randomly selected precincts. Again, the system performed as expected.

III. Election Day

A. Opening the Polls and Voting

Election morning ran well and voting began on time. The Department began calling Inspectors at each polling place using RCV ballots. The purpose of these calls was to reinforce the poll workers training related to RCV and to gauge whether the Department needed to provide extra assistance to any polling place. After making the phone calls, the Department felt confident that poll workers were following their training and that voters were receiving assistance.

Throughout the day, the Department received calls that Eagle machines were not working properly. The majority of voting machine issues surrounded ballot jams causing the Eagles to not accept ballots. Voting continued in these instances since poll workers were instructed to place voted ballots in the auxiliary bin until the Eagles were repaired or replaced by a Field Election Deputy or an ES&S technician. ES&S indicated that voters were not removing the tear-away stubs before placing ballot cards into the Eagles, which is unrelated to RCV. The

majority of the reported incidents were resolved quickly. None of the above incidents interrupted the voting process for any notable length of time.

One Eagle issue that should be noted was a lack of communication between the PC cards and the memory packs in the Eagles. Calls to the Department described messages such as "IDA Error" or "PCMCIA card not communicating." Such calls required an ES&S technician to travel to the precinct to repair the machine. The Eagle had to be restarted which meant "reopening" the polls and re-reading all the ballots cast up to that point in the day, a process that the Department's Field Election Deputies (FEDs) oversaw.

B. Closing the Polls

Election evening also ran remarkably well. The machines functioned properly with only minor incidents such as printer errors and result tape jams; however, it is unclear if these issues were related to ranked-choice voting system modifications. These minor incidents did not have a great affect on the closing of the polling places. Some polling places in San Francisco did remain open past 8 p.m. but this was due to high voter turnout and many people heading to the polling places later in the evening.

ES&S was unable to install a hatch similar to the opening that currently exists for the memory packs that poll workers could unlock and open to retrieve the card. While the inspectors continued the practice of retrieving the Eagle's memory pack for transportation to one of several transmission sites set up around the city, the new memory cards were left in the Eagles. Deputy Sheriffs, who retrieve all ballots at each of the City's polling sites, also collected the Eagles and transported them to the Department's processing center, where trained personnel removed the cards. Deputy Sheriffs then transported the removed cards to City Hall on election night where data was extracted.

The new procedure for retrieving the PC cards was due to the location of the cards within the Eagle machines. Whereas the memory packs are easily accessible by way of a hatch on the external cover of the machines, the PC memory cards are installed in a location that can only be accessed by removing the entire cover. The Department determined that the sensitivity of the Eagles required personnel trained specifically in removing the cards and that there would be insufficient time during poll workers' classes to sufficiently demonstrate the removal of the PC cards.

C. Processing Ballots and Reporting Results

The processing of RCV ballot cards differed little from the processing of other ballot cards. All cards were placed into the Eagles and the IV-Cs and the machines scanned the cards and recorded the marks voters placed as their choices. In the tabulation of results, however, many differences exist among RCV ballot cards and the traditional ballots for both contests and measures.

Determining a winner in a ranked-choice contest depends on a series of steps called "passes" that require a high level of accuracy. Each pass removes the candidate or candidates with the fewest number of votes from the contest and redistributes those candidate's votes according to the voters' second and third choices. It is possible to have almost as many passes as

there are candidates in a contest, as each pass is dependent on the outcome of the previous pass. The outcome of the election is dependent upon the accuracy in design and proper application of the software at each step in the tallying of votes. In a very close race, the erroneous recording of a very small number of votes could theoretically affect the outcome of every subsequent pass.

Overall, the processing of voted ballots was successful – the system hardware, firmware, and software functioned as expected, with some exceptions. The Eagles and the Optech IV-C machine read voters' marks accurately and recorded votes accurately in both memory devices; the memory packs would record all selections on all voted ballot cards and in the case of the RCV ballot, would record the voter's first choice. The PC memory cards recorded the first, second, and third-choice RCV data.

i. ***Absentee Ballot Processing:*** The processing of voted Absentee ballots using the IV-C optical scan reader commenced on the seventh day prior to the election. As with the precinct Optech IIIP Eagle ballot reader, the IV-C accommodated the reading of the RCV ballots with the other non-RCV ballots making presort unnecessary. As in other elections, the IV-C was set up to separate ballots containing possible overvotes and undervotes in order for the Department's staff to do a more detailed review of the inherent ballot conditions or errors (stray marks, ballot corrections, or clear under/overvotes). Upon initial review of the returned absentee ballots, it appeared that voters properly marked their RCV ballot cards showing voters understood the new voting method. Again, this was especially notable, as the Absentee voter does not have the benefit of requesting assistance from a pollworker while marking their ballot. Absentee voters must rely upon voting instructions enclosed with their ballot, and if necessary, call the Election Department for further assistance. It should also be noted that a log of daily calls into the public phone bank did not show a remarkable number of requests for assistance understanding RCV.

ii. ***Precinct Ballot Processing:*** As noted in the prior section, voting at the polling places ran relatively smooth. There were only four precincts where there was a failure of the memory pack or PC memory card making it necessary to recapture the Election Day activity by re-running ballots through an Eagle. This was discovered during the reading of the PC memory cards on election night showing a mismatch of data sets between the memory pack and the PC memory card. The materials from those identified precincts were located and brought back to City Halls' central counting place.

iii. ***Reporting Results:*** On election night, in addition to the statewide and other local contests, the Department reported only the first-choice data from ranked-choice contests, without application of the ranked-choice algorithm. The City and County Charter indicates that the algorithm shall not be applied until all first-choice votes have been processed. Due to high public interest, the Department planned to report a preliminary and initial RCV Algorithm report the day after the election at 4:00 p.m. as well as up to three times a week until results were final.

The Department, however, needed to change the schedule for reporting preliminary RCV results. During the first attempt at to combine the ranked-choice data and start the application of the RCV algorithm, ES&S realized the system was not tabulating all of the processed ballots and could not produce complete preliminary RCV results. The system had saved all votes, but was unable combine all of the RCV votes for tabulating. By the following day, ES&S had identified the problem as a limitation on the volume of data that the company's

vote-tabulating software could compute. An ES&S spokesperson attributed this limitation to unexpectedly high voter turnout. By that Friday, November 5th, ES&S isolated and removed this particular limitation on the software, as well as another limitation found during Logic and Accuracy Testing, as noted in the above discussion on system L&A testing which limited the software to 18 passes. ES&S developed a solution and, after review, the Secretary of State's office granted an administrative approval for the City to implement the solution. This solution enabled the Department to return to its original plan of releasing preliminary RCV results during the official canvass.

While this particular software problem caused a delay in the reporting of preliminary ranked-choice results, it did not affect the reporting of the first-choice votes, the capture of actual vote data, or the reporting of results in any other contests. The Department continued to issue updated general election results, including first-choice RCV results, each day until the solution allowed the reporting of tabulated ranked-choice votes, showing candidates being eliminated and votes redistributed. Although the preliminary report did not indicate the actual elimination of any candidates or redistribution of votes as all ballots had not been counted, it did provide the public with the opportunity to understand how RCV worked prior to the release of the final results.

According to a City Information Technology worker who worked directly with ES&S during design, testing, and deployment of the system, the delay in results reporting was due to a limitation in the software routine used to combine the data from the Eagle IIIPs (.BIM – Ballot IMages files) and from the Optech IV-C (.OBI – Optech Ballot Image files) into the single set of files which would be used to run the RCV algorithm. There is a fundamental difference in the design of the system between the two types of files. Each of the Eagle machines recorded data from a single precinct, while the Optech IV-C absentee ballot readers recorded data in batches of ballots, which contained data from many precincts – theoretically, a single batch could contain data from all of the City's 578 precincts. The original software contained an inadequate parameter on the number of different precincts' data that could be combined from a single .OBI file with the single-precinct data from the Eagles and was the direct cause of the delay in results reporting.

This account of the results reporting delay suggests that the problem was not related to high voter turnout, but to an unnecessary limitation of the software. The software could have been written with the realization that a single batch run on the IV-C – namely the batch run for the seven days preceding the election – would have contained most or all of the precincts in the City. To their credit, E&S was very responsive to this problem, working with the Secretary of State's office to correct it in less than two days. .

IV. Looking Forward

While the City's first election was conducted successfully, there are some suggestions the Department would like to indicate for the future of ranked-choice voting using ES&S's currently developed program:

Ballot Reports: The Department would like to see even greater transparency in the production of electronic ballot images (data representing an exact replica of each marked ballot contest). The PC memory cards hold static files of ballot selections; however, the software that

incorporates those selections into the results reporting application applies the RCV algorithm that eliminates candidates and advances votes upon file upload. In other words, if a voter selects only a second and third choice on his or her ballot, tabulation software creates a ballot image that shows the voter has made first- and second-choice selections instead of second- and third-choice selections. This is the correct way to count the ballot, and conforms to the language of the San Francisco Charter, but is not the actual reflection of the voter's ballot selections. For a possible recount in future elections, it would be useful to have an exact electronic replication of each ballot.

Electronic Verification of Ballot Data: The current RCV system also requires a more streamlined data validation process incorporated into the software. During the past election, ES&S required the expert assistance from its programmers to perform data validation to ensure the system accurately tabulated votes. Ideally, this verification system would review data at the time that PC cards are uploaded and would check that precinct numbers and vote data match, and that PC card data matches memory pack data. Although such verification and review occurred during the November 2004 election, it was cumbersome and added to the time necessary to process and report RCV results.

Application of RCV Algorithm: The system needs to be able to accommodate an excess of 27 passes. The system must be prepared for a large amount of candidates qualifying for a single office and the need for continued application of the algorithm to determine a winner.

Write-in Votes: The Department also suggests an improvement to the process of tallying write-in votes. If there was only one qualified write-in candidate for an RCV contest, ES&S personnel indicated they could use a default setting where the system would be able to tally those votes (after manual review and confirmation of qualified names). It would be important to include these write-in ballots with the initial tally of the first-choice selections since that write-in candidate may have received a majority of the votes. If any candidate did not receive a majority, the system could then invoke the RCV algorithm, which would include votes for the write-in candidate.

If the contest included more than one qualified write-in candidate, ES&S indicated it would not be possible for the system electronically tally these votes and apply the algorithm. The system is unable to detect which name was written in on the voted ballot. For contests with more than one qualified write-in candidate, the Department to separate every RCV card with a write-in vote(s), and then manually enter into the tabulation module each write-in selection as well as the any other non-write-in candidate selection on the card. For District elections, this may not appear laborious but for a citywide race in a high voter turn-out election, with more than one qualified write-in candidate, this process would take a substantial amount of time to determine results (keeping in mind that the RCV algorithm cannot be applied until all first-choice selections have been tallied in the first round).

Conclusion

After two years of moving towards the implementation of RCV, San Francisco held the first RCV elections in November 2004. San Francisco's voters understood ranked-choice voting, how to mark their ballot cards, and understood the result of choosing not to mark a candidate name in all three ranks. An assessment of ranked-choice voting released after the election by San Francisco State University's Public Research Institute showed approximately 87% of the voters surveyed indicated that they understood RCV either "perfectly well" or "fairly well." The survey did show, however, that prior knowledge and voter education appears to have lessened the potential for language-based difficulty in using the RCV ballot.

In the future, the State Elections Code will need to provide greater clarification for RCV, especially if other counties and cities begin using this voting method. For instance, San Francisco relied on the system's operating procedures for developing RCV canvass procedures since State law does not address this issue. Without uniform guidance contained in the Elections Code, registrars will find it continuously more challenging to implement and conduct RCV elections compared to more traditional elections, which are highly regulated under State law. By having greater statutory guidance, vendors will also be able to more readily develop and certify voting systems that can conduct this type of election. Today, vendors are reluctant to develop ranked-choice or other similar voting methods because they face uncertainty in how to design and have certified systems that meet the requirements of each jurisdiction's local laws.

Finally, the City and County of San Francisco owes much gratitude to staff in the Secretary of State's office and member of the Voting System and Procedures Panel (VSPP) for their efforts. San Francisco's ranked-choice voting method is unique and both the staff and panel members needed to fully understand its application before considering whether to certify RCV for use in the November 2004 election. The uniqueness of RCV presented many challenges during the certification process and both the staff at the Secretary of State office, and members of the VSPP, were continuously thorough in ensuring the RCV system met the necessary certification requirements.

Please feel free to contact the Department of Elections for further information regarding this report. Inquiries should be addressed to:

Mr. John Arntz, Director
Department of Elections
City and County of San Francisco
1 Dr. Carlton B. Goodlett Pl., Room 48
San Francisco, CA 94102
Phone: (415) 554-4375
Fax: (415) 554-7666
www.sfgov.org/elections