



Office of the City Manager

INFORMATION CALENDAR

June 12, 2007

To: Honorable Mayor and  
Members of the City Council

From: *PK* Phil Kamlarz, City Manager

Submitted by: Pamyla Means, City Clerk

Subject: Status Update – Instant Runoff Voting for Municipal Elections

INTRODUCTION

The City Clerk is currently working with the Alameda County Registrar of Voters (along with other Alameda County cities) to implement Instant Runoff Voting (IRV), also known as Ranked Choice Voting (RCV). This new system is slated for implementation for the November 2008 municipal elections. There are many activities involved in implementing IRV. The Council must adopt an ordinance that outlines the framework under which IRV will proceed, and a comprehensive voter education and outreach process needs to be established. A copy of the provisions adopted by the City of Oakland and the City and County of San Francisco are attached as a starting point to frame Berkeley's ordinance.

CURRENT SITUATION AND ITS EFFECTS

In November 2004, Berkeley voters passed Measure I, amending the city's charter to express the voters' will to implement IRV. Article III, Section (5), Paragraph (12) of the Berkeley City Charter sets forth three conditions (technical capability, ability to consolidate, financial limitations) that must be met before an ordinance establishing IRV for city elections can be adopted.

The momentum to adopt IRV in Alameda County increased when voters in Oakland passed Measure O in November 2006; the measure amended the charter to adopt IRV for single winner contests starting in November 2008. Oakland is the largest city in Alameda County with over 26% of the county's voters. In addition, the City of San Leandro has enabling legislation in their charter similar to that of Berkeley. This momentum, coupled with the use of IRV in The City and County of San Francisco in November 2004, 2005, and 2006 has led to a serious effort by the Alameda County Registrar of Voters and their vendor, Sequoia Voting Systems, to develop an IRV system. Initial expectations were to have the system certified and implemented in time for the November 2007 UDEL elections.

Sequoia Voting Systems is currently in the latter stages of program development of an IRV system. The system will be used in Alameda County, and is in progress for use in San Francisco.

The charters of both San Francisco and Oakland state that the IRV system shall rank as many choices as there are candidates for a contest, but in any case, it must be able to tabulate rankings of no less than three candidates. The section of the Berkeley Charter enabling the use of IRV does not specify a minimum number of rankings.

When San Francisco first developed their IRV system, they experimented with the design and layout of the paper ballot to rank several choices beyond the minimum of three. Voters tested the ballots and it was found that the extended ranking was confusing and difficult for voters to navigate and understand. Due to voter confusion issues, the limitations of paper size, design, and layout, the number rankings is confined to three candidates. Given these limitations, and the fact that Alameda County employs a paper-based optical scan system, the IRV ballots used by Berkeley voters will contain three choices.

The Sequoia system is based primarily on the specifications outlined in Oakland's Measure O. It is expected that the software will be submitted for testing and certification at the state and federal levels later this year. Once the software is certified, Alameda County can begin implementation. The ROV expects that the software will be certified in 2007, but it is uncertain at this time if the system will be ready for use in the November 2007 elections. The ROV does expect to achieve full implementation of IRV for municipal elections in November 2008. The Alameda County ROV has indicated that a municipal IRV election in Berkeley on November 4, 2008 will be consolidated with the general election held on the same date.

#### BACKGROUND

Instant Runoff Voting or Ranked Choice Voting offers voters the opportunity to rank their preferences for candidate races on one ballot. The voters' choices for first preference are counted, and if no candidate reaches 50% +1, the voting system conducts an "instant runoff" by eliminating the candidate with the fewest votes and assigning the second choice votes from the ballots for the eliminated candidate to the remaining candidates. This process is repeated until one candidate has a majority of the votes.

Prior to the passage of Berkeley's IRV measure in 2004, the City and County of San Francisco amended their charter to compel the implementation of IRV by November 2002. San Francisco was not able to meet the initial deadline, but IRV was successfully implemented in time for their November 2004 election and was used again in November 2005 and November 2006.

With Oakland's move toward IRV, the County Registrar has contracted with Sequoia Voting Systems for the development of IRV software and expects that this software will be completed and certified by the end on 2007.

Assemblymembers Mark Leno and Gene Mullin introduced Assembly Bill 1294 on February 23, 2007 to allow cities and counties to use IRV in local single-winner and multiple-winner elections. The bill spells out detailed language that will be added to the Elections Code governing IRV elections and voting systems. There are only minor differences between the bill language and Measure O.

In order to implement IRV for the City of Berkeley, an ordinance must be adopted. The charter sets three conditions that are required for establishment of IRV and the charter is clear that all of these conditions must be met in order to establish IRV by ordinance. These conditions are:

- a) The voting equipment and procedures are technically ready to handle instant runoff voting in municipal elections;
- b) Instant runoff voting will not preclude the City from consolidating its municipal elections with the County;
- c) Instant runoff elections will not result in additional City election costs

Steps for 2007 and 2008 include the development and adoption of an implementing ordinance, and establishing a comprehensive voter education and outreach program. Staff recommends that the large-scale education program start after the June 2008 primary election to reduce voter confusion and maximize impact by focusing outreach dollars and efforts closer to the time that voters will receive their ballots for the November 2008 election.

The City Clerk will engage in ongoing coordination efforts with the ROV, the City of Oakland, and the City of San Leandro to determine the most effective and cost efficient methods to educate voters about IRV.

#### FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

The short term and long term costs of implementing IRV for municipal elections in Berkeley are unknown. There will be significant one-time costs associated with the development and certification of the voting system upgrade, the extensive public outreach campaign, and additional training for poll workers and other elections officials.

Ongoing costs may also be significant due to the need for a second ballot card for the IRV contests, which creates higher printing and postage costs, as well as higher overhead costs from the ROV. It has long been anticipated that the costs of implementing and maintaining IRV will be offset in the long run by the costs savings from avoiding run off elections.

#### CONTACT PERSON

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#### Attachments:

- 1: San Francisco City Charter Section 13.102
- 2: Oakland City Charter Section 1105
- 3: Comparison of Provisions in Oakland and San Francisco Charters
- 4: Explanation of Provisions in Comparison
- 5: IRV and Choice Voting Comparison
- 6: Frequently Asked Questions

**San Francisco Charter Section 13.102****SEC. 13.102. INSTANT RUNOFF ELECTIONS.**

(a) For the purposes of this section: (1) a candidate shall be deemed "continuing" if the candidate has not been eliminated; (2) a ballot shall be deemed "continuing" if it is not exhausted; and (3) a ballot shall be deemed "exhausted," and not counted in further stages of the tabulation, if all of the choices have been eliminated or there are no more choices indicated on the ballot. If a ranked-choice ballot gives equal rank to two or more candidates, the ballot shall be declared exhausted when such multiple rankings are reached. If a voter casts a ranked-choice ballot but skips a rank, the voter's vote shall be transferred to that voter's next ranked choice.

(b) The Mayor, Sheriff, District Attorney, City Attorney, Treasurer, Assessor-Recorder, Public Defender, and members of the Board of Supervisors shall be elected using a ranked-choice, or "instant runoff," ballot. The ballot shall allow voters to rank a number of choices in order of preference equal to the total number of candidates for each office; provided, however, if the voting system, vote tabulation system, or similar or related equipment used by the City and County cannot feasibly accommodate choices equal to the total number of candidates running for each office, then the Director of Elections may limit the number of choices a voter may rank to no fewer than three. The ballot shall in no way interfere with a voter's ability to cast a vote for a write-in candidate.

(c) If a candidate receives a majority of the first choices, that candidate shall be declared elected. If no candidate receives a majority, the candidate who received the fewest first choices shall be eliminated and each vote cast for that candidate shall be transferred to the next-ranked candidate on that voter's ballot. If, after this transfer of votes, any candidate has a majority of the votes from the continuing ballots, that candidate shall be declared elected.

(d) If no candidate receives a majority of votes from the continuing ballots after a candidate has been eliminated and his or her votes have been transferred to the next-ranked candidate, the continuing candidate with the fewest votes from the continuing ballots shall be eliminated. All votes cast for that candidate shall be transferred to the next-ranked continuing candidate on each voter's ballot. This process of eliminating candidates and transferring their votes to the next-ranked continuing candidates shall be repeated until a candidate receives a majority of the votes from the continuing ballots.

(e) If the total number of votes of the two or more candidates credited with the lowest number of votes is less than the number of votes credited to the candidate with the next highest number of votes, those candidates with the lowest number of votes shall be eliminated simultaneously and their votes transferred to the next-ranked continuing candidate on each ballot in a single counting operation.

(f) A tie between two or more candidates shall be resolved in accordance with State law.

(g) The Department of Elections shall conduct a voter education campaign to familiarize voters with the ranked-choice or "instant runoff," method of voting.

(h) Any voting system, vote tabulation system, or similar or related equipment acquired by the City and County shall have the capability to accommodate this system of ranked-choice or "instant run-off" balloting.

(i) Ranked-choice, or "instant runoff," balloting shall be used for the general municipal election in November 2002 and all subsequent elections. If the Director of Elections certifies to the Board of Supervisors and the Mayor no later than July 1, 2002 that the Department of Elections will not be ready to implement ranked-choice balloting in November 2002, then the City shall begin using ranked-choice, or "instant runoff," balloting at the November 2003 general municipal election.

If ranked-choice, or "instant runoff," balloting is not used in November of 2002, and no candidate for any elective office of the City and County, except the Board of Education and the Governing Board of the Community College District, receives a majority of the votes cast at an election for such office, the two candidates receiving the most votes shall qualify to have their names placed on the ballot for a runoff election held on the second Tuesday in December of 2002.

## Oakland City Charter

**Section 1105. Rank Choice Voting.** Elections for all city offices, including but not limited to Mayor, Councilmember, City Attorney, City Auditor, and School Director, shall be conducted using ranked choice voting, known sometimes as "instant runoff voting."

(A) Definitions. "Ranked choice voting" shall mean an election system in which voters rank the candidates for office in order of preference, and the ballots are counted in rounds that, in the case of a single-winner election, simulate a series of runoffs until one candidate receives a majority of votes. In each round of counting: (1) "continuing ballot" shall mean a ballot that counts towards some candidate; (2) "continuing candidate" shall mean a candidate that has not been eliminated; and (3) "majority of votes" shall mean more than fifty percent of the votes coming from continuing ballots.

(B) General Provision. Ranked choice voting elections for single-winner city offices shall be conducted according to the procedures in this section. The City shall conduct a voter education campaign to familiarize voters with ranked choice voting. The use of ranked choice voting shall commence with the 2008 General Municipal Election.

(C) Ballot. The ranked choice voting ballot shall allow voters to rank as many choices as there are candidates. The ballot shall not interfere with a voter's ability to rank a write-in candidate.

(D) Tabulation. The ballots shall be counted in rounds; (1) In the first round, every ballot shall count as a vote towards the first choice candidate. (2) After every round, if any candidate receives a majority of votes from the continuing ballots, that candidate shall be declared the winner. If no candidate receives a majority, the candidate receiving the smallest number of votes shall be eliminated, and every ballot counting towards that candidate shall be advanced to the next-ranked continuing candidate. All the ballots shall be counted again in a new round.

(E) Ties. In the event that two or more candidates tie for the smallest number of votes, the candidate to eliminate shall be chosen by lot.

(F) Elimination of more than one candidate. During the elimination stage of any round, in the event that any candidate has more votes than the combined vote total of all candidates with fewer votes, all the candidates with fewer votes shall be eliminated simultaneously, and those ballots advanced to the next-ranked continuing candidate.

(G) Skipped rankings. In the first or any round, in the event that any ballot reaches a ranking with no candidate indicated, that ballot shall immediately be advanced to the next ranking.

(H) Undervotes, Overvotes, and Exhausted Ballots. After each round, any ballot that is not continuing is either an undervote, overvote, or exhausted ballot, as follows. Any ballot that has no candidates indicated at any ranking shall be declared an "undervote."

In the event that any ballot reaches a ranking with more than one candidate indicated, that ballot shall immediately be declared an "overvote." In the event that any ballot cannot be advanced because no further candidates are ranked on that ballot, that ballot shall immediately be declared "exhausted." Any ballot that has been declared an undervote, overvote, or exhausted shall remain so and shall not count towards any candidate in that round or in subsequent rounds.

(I) Reports. Summary, ballot image, and comprehensive reports shall be made available after each ranked choice voting election, as follows: (1) The "summary report" for a race shall mean a report that lists the candidate vote totals in each round, along with the cumulative numbers of undervotes, overvotes, and exhausted ballots in each round. (2) The "ballot image report" for a race shall mean a report that lists, for each ballot, the candidate or candidates indicated at each ranking, the precinct of the ballot, and whether the ballot was cast absentee. In the report, the ballots shall be listed in an order that does not permit the order in which they were cast in each precinct to be reconstructed. (3) The "comprehensive report" for a race shall mean a report that breaks the numbers in the summary report down by precinct. The report shall list, for each round, the number of ballots cast in each precinct (a) that count as votes for each candidate in that round, (b) that have been declared undervotes, (c) that have been declared overvotes up to that point, and (d) that have been declared exhausted up to that point. (4) Mode and manner of release. Preliminary versions of the summary report and ballot image report shall be made available as soon as possible after the ballots have begun to be processed and counted. The summary report, ballot image report, comprehensive report, and preliminary versions of the summary report and ballot image report shall be made available to the public during the canvass via the Internet and by other means. The ballot image report and preliminary versions of the ballot image report shall be made available in a plain text electronic format.

(J) Manual Tally. Prior to the selection of precincts for the public one percent manual tally, as provided by State law, a report shall be made available to the public that lists, for the ballots subject to the manual tally, the number of those ballots in each precinct that counted in each round as undervotes, overvotes, exhausted ballots, and as votes for each candidate. The public manual tally shall check those vote totals in each of the randomly selected precincts.

(K) Changes to Procedures. For the purposes of this subsection: "voting equipment" shall mean all ballots and/or voting devices, vote tabulating systems and/or similar or related systems to be used in the conduct of the City's election, including but not limited to paper ballot systems, optical scan systems, and touch-screen systems. (1) Number of rankings. In the event that the voting equipment cannot feasibly accommodate a number of rankings on the ballot equal to the number of candidates, the City Clerk may limit the number of choices a voter may rank to the maximum number allowed by the equipment. This limit shall never be less than three. (2) Voting equipment. If the voting equipment cannot feasibly accommodate all of the procedures in subsections (E)-(J) above, the City Clerk may make changes to those procedures provided that ranked choice voting shall still be used and the smallest feasible number of changes made until

such time as the voting equipment can accommodate those procedures in their entirety. (3) State guidelines. If the State of California adopts guidelines for the conduct of ranked choice voting elections and the voting equipment used to conduct the City's election can accommodate the State's guidelines, the City Clerk shall have the option of adopting those guidelines, in whole or in part, in lieu of the ranked choice voting procedures in this section, (4) First choice tally. The City Clerk may authorize the following change to make ranked choice voting on voting equipment feasible: before counting the ballots in rounds, the first ranking on every ballot shall be tallied, with the exception of overvotes. If some candidate receives a majority of first rankings from all ballots cast, including undervotes and excluding overvotes, that candidate shall be declared the winner; and the ballots shall not be counted in rounds. Otherwise, the ballots shall be counted in rounds in accordance with this section. (5) Election integrity. The City Clerk shall further have the authority to make any changes to these procedures necessary to preserve the secrecy of the ballot and ensure the integrity and smooth functioning of the election, provided that ranked choice voting shall still be used and the smallest number of changes made to achieve such purposes.

(L) Exception from Using Ranked Choice Voting. Notwithstanding any other provision of this Charter, the City shall use ranked choice voting once the Alameda County Registrar of Voters is able to conduct the election on behalf of the City in accordance with the requirements and procedures of this section, including any changes to such procedures made pursuant to subsection (K).

(M) Election Procedures if Ranked Choice Voting is Not Used.

(1) In the event that the City is unable to use ranked choice voting, the City shall hold Municipal Nominating Elections for the nomination of officers and for such other purposes as the Council may prescribe, which shall be held in the City on the first Tuesday after the first Monday in June in each even-numbered year. In order to consolidate Municipal Nominating Elections with Statewide Primary Elections, the council may by ordinance provide for a date for a Municipal Nominating Election which conforms to the date of a Statewide Primary Election. Any candidate receiving a majority of the vote cast for all candidates for that office at the Municipal Nominating Election shall be declared elected. (2) If at any Municipal Nominating Election there is any office to which no person was elected, then the two candidates for such office receiving the highest number of votes for such office shall be the candidates, and the only candidates, for such office whose names shall be printed upon ballots to be issued at the second or General Municipal Election; provided that, in any event, all persons receiving a number of votes equal to the highest number of votes received by any candidate shall also be candidates at such second election. The candidate receiving the highest number of votes cast for all candidates for that office at the second or General Municipal Election shall be declared elected.

Comparison of San Francisco and Oakland Instant Runoff Voting Charter Amendments

Item	Provisions	San Francisco Charter Sec. 13.102	Oakland Charter Sec. 1105	Notes
1	Single winner offices only	YES	YES	
2	Number of rankings equals number of candidates	YES	YES	
3	Exception to no fewer than 3 rankings	YES	YES	
4	Skipped rank advances lower ranks	YES	YES	
5	Must accommodate write-ins	YES	YES	
6	Majority of 1st choice votes on initial count = elected	YES	YES	
7	Tiebreaker for last place candidate	NO	YES	
8	Tiebreaker for first place candidate	YES	NO	S.F. only defers to state law
9	Simultaneous elimination	YES	YES	
10	Voter education requirement	YES	YES	
11	Any new system purchased shall have IRV capability	YES	NO	
12	Specific election date targeted for implementation	YES	YES	Oakland's date is November 2008
13	If IRV is not used, then provisions for election by runoff	YES	YES	
14	Requires specific total and summary reports	NO	YES	
15	Requires specific manual tally reports	NO	YES	
16	Exceptions to report requirements	NO	YES	
17	Exceptions to tiebreaker requirements	NO	YES	
18	Exceptions to sim. elim. requirements	NO	YES	
19	Exceptions to skipped rankings requirements	NO	YES	
20	Exceptions to certain definitions	NO	YES	
21	Option to adopt state guidelines for IRV in lieu of Charter	NO	YES	
22	Exception to change procedures - intent to limit changes	NO	YES	
23	Contingent on ROV ability to perform	YES	YES	
24	Specifically mentions certification as condition of use	NO	NO	
	<b>Definitions</b>			Some definitions have varying levels of clarity
	undervote	NO	YES	
	overvote	NO	YES	
	exhausted ballot	YES	YES	
	continuing ballot	YES	YES	
	continuing candidate	YES	YES	
	majority vote	NO	YES	

## Explanation of Comparison Provisions

Item	Provision	Explanation
1	Single winner offices only	"Vote for One" offices
2	Number of rankings equals number of candidates	Voters rank all candidates for a contest
3	Exception to no fewer than 3 rankings	Language in the regulations that sets a minimum number of choice if the voting system cannot accommodate the full number of candidate rankings
4	Skipped rank advances lower ranks	If a voter leaves a rank blank, the next valid rank that they have voted is moved up. If they leave #1 blank, but vote #2, the option in #2 now becomes their #1 rank for the first round of tabulation.
5	Must accommodate write-ins	IRV ballots will contain a space for write-in candidates and be able to tabulate votes for qualified write-in candidates
6	Majority of 1st choice votes on initial count = elected	If one candidate receives a majority of votes after the initial count, that candidate is deemed the winner
7	Tiebreaker for last place candidate	Tiebreakers are needed if there is a tie for the candidate with the fewest votes
8	Tiebreaker for first place candidate	Provisions currently in Berkeley Charter
9	Simultaneous elimination	Simultaneous Elimination is the process by which multiple candidates are eliminated in a single round. If the total number of votes for two or more candidates in one contest is less than the next highest candidate in that contest, then all the lesser candidates are eliminated and those ballots move on to the next round. See below.
10	Voter education requirement	Requires voter education campaign
11	Any new system purchased shall have IRV capability	San Francisco is a City and County, so this requirement is within their purview.
12	Specific election date targeted for implementation	
13	If IRV is not used, then provisions for election by runoff	The Charters restate the previous runoff provisions in the event that IRV is not implemented
14	Requires specific total and summary reports	The Oakland Charter requires that certain types of results reports are created and specifies what should be included in these reports
15	Requires specific manual tally reports	The Oakland Charter requires the creation of certain types of results reports and specifies contents of the reports
16	Exceptions to report requirements	Oakland Charter has exception clauses to many provisions in the event that the requirements are not feasible

## Explanation of Comparison Provisions

Item	Provision	Explanation
17	Exceptions to tiebreaker requirements	Oakland Charter has exception clauses to many provisions in the event that the requirements are not feasible
18	Exceptions to sim. elim. requirements	Oakland Charter has exception clauses to many provisions in the event that the requirements are not feasible
19	Exceptions to skipped rankings requirements	Oakland Charter has exception clauses to many provisions in the event that the requirements are not feasible
20	Exceptions to certain definitions	Oakland Charter has exception clauses to many provisions in the event that the requirements are not feasible
21	Option to adopt state guidelines for IRV in lieu of Charter	If the state develops regulations for IRV, the local jurisdiction may adopt those guidelines in lieu of charter amendments
22	Exception to change procedures - intent to limit changes	Oakland Charter has exception clauses to many provisions in the event that the requirements are not feasible - this also states the intent to limit changes when possible
23	Contingent on ROV ability to perform	Registrar of Voters must be able to successfully implement IRV prior to use in municipal elections
24	Specifically mentions certification as condition of use	Neither Charter specifically mentions state or federal certification as a condition for implementation

**Simultaneous Elimination**  
 Candidate A - 2500 votes  
 Candidate B - 1700 votes  
 Candidate C - 1000 votes  
 Candidate D - 300 votes  
 Candidate E - 100 votes

Candidates C, D, and E would all be eliminated because their combined vote total (1400) is less than Candidate B's vote total (1700). The second choice votes on the ballots that had C, D, or E listed as first the choice would then be distributed to A and B in the second round of tabulation.

# Attachment 5

## Two Types of Ranked Choice Voting

The Berkeley City Charter currently authorizes the use of Instant Runoff Voting for the single winner municipal contests only.

<b>INSTANT RUNOFF VOTING</b> <b>single-winner elections</b>	<b>CHOICE VOTING</b> <b>multiple-winner elections</b>
<p>Voters rank candidates in order of choice: 1, 2, 3 and so on. Voters can rank as many or as few candidates as they prefer.</p> <p>It takes a majority to win. If anyone receives a majority of the first choice votes, that candidate is elected. If not, the last place candidate is defeated, just as in a runoff election, and all ballots are counted again, but this time each ballot cast for the defeated candidate counts for the next choice candidate listed on those ballots.</p> <p>The process of eliminating the last place candidate and recounting the ballots continues until one candidate receives a majority of the vote.</p> <p>With modern voting equipment, all of the counting and recounting takes place rapidly and automatically.</p> <p>IRV acts like a series of runoff elections in which one candidate is eliminated each election. Each time a candidate is eliminated, all voters get to choose among the remaining candidates. This continues until one candidate receives a majority of the vote.</p>	<p>Voters rank candidates in order of choice by indicating their first choice, second and so on. Voters can rank as many or as few candidates as they prefer.</p> <p>The first step is to determine the number of votes needed to win a seat, termed "the winning threshold." This threshold is the fewest number of votes that only the winning number of candidates can obtain.</p> <p>In a hypothetical election with 1000 voters and three seats, the winning threshold is 251 votes. Once three candidates have received 251 votes, only 247 votes would remain for any fourth candidate.</p> <p>The ballot-count occurs in a series of rounds. After counting first choices, any candidate reaching the winning threshold is elected and their surplus votes beyond that threshold are distributed to next choices.</p> <p>If no candidate has reached threshold, the weakest candidate is eliminated, and ballots cast for that candidate are counted for their next choice. In each round, a voter's ballot counts toward that voter's top-ranked candidate who remains in the race.</p>

**Above information excerpted from materials provided by Californians for Electoral Reform and the Center for Voting and Democracy.**

# Attachment 6

## Frequently Asked Questions About Instant Runoff Voting

**What is instant runoff voting?** Instant runoff voting is a method of electing a single winner. It provides an alternative to plurality and runoff elections. In a plurality election, the highest vote getter wins even if s/he receives less than 50% of the vote. In a runoff election, two candidates advance to a runoff if no candidate receives more than 50% in the first round.

**Where is IRV used?** Ireland uses IRV to elect its president, Australia to elect its House of Representatives, London to elect its mayor, San Francisco to elect its major city offices such as mayor, Utah Republicans to nominate congressional nominees at its state convention, many major universities for their student government elections and the American Political Science Association to elect its president. Literally hundreds of jurisdictions, organizations and corporations use IRV to elect leaders.

**Can the voting equipment handle IRV?** Modern voting equipment, such as optical scanners and computer touch screens, can handle IRV. Older technologies such as punch cards and lever machines cannot handle IRV, so it doesn't make sense to adopt IRV until new equipment is purchased. In these cases, we recommend legislation authorizing the use of IRV when the equipment is available. For reasons unrelated to IRV, the trend in voting equipment is away from the older technologies, so more and more jurisdictions are acquiring equipment that can handle IRV.

**Why don't more places use IRV?** Prior to the advent of modern vote counting equipment, IRV required a time-consuming and costly hand count. Some jurisdictions that used IRV in statewide primaries found that they rarely had plurality (less than majority) winners, so IRV seemed unnecessary. With today's diversity and proliferation of parties and candidates, low plurality winners are more common, and hand counts are unnecessary.

**Above information excerpted from materials provided by Californians for Electoral Reform.**

