January 17, 2001

TO: EACH SUPERVISOR

FROM: Conny B.McCormack, Registrar-Recorder/County Clerk

VOTING SYSTEM COMPARISONS/EVAUATION OF TOUCH SCREEN PILOT PROJECT/RECOMMENDATIONS FOR THE FUTURE

This report responds to Supervisor Antonovich's motion of November 14, 2000 requesting the Registrar-Recorder/County Clerk (RR/CC) and the Chief Administrative Officer (CAO) to report on plans to implement a state-of-the-art, tamper-proof voting system. It includes an overview of the types of currently available voting systems and also summarizes the strengths and weaknesses of each system.

The CAO's office reviewed the financial aspects of this report. Although the motion did not specifically request input from the Chief Information Officer (CIO), I requested the CIO to contribute a companion report on touch screen voting system security issues in response to the "tamper proof" portion of the Board motion. The CIO agreed to do so and his comments are included at Attachment A.

This report also evaluates the touch screen voting pilot project instituted during the "early" voting period in conjunction with the November 7, 2000 General Election. During the three-week period preceding election day, 21,963 voters cast their ballots on electronic touch screen devices at nine locations countywide.

Recommendations for the future are included at the end of this report.

OVERVIEW

Los Angeles County is the largest voting jurisdiction in the United States with over four million registered voters. For the November 7, 2000 General Election, a record-high 2,769,927 voters cast ballots countywide. This was more ballots than were cast **statewide** in 41 of the 50 states. Additionally, absentee voting reached an all-time peak – the County's 543,143 absentee ballots[1] exceeded the total ballots cast in eight states. The logistics of preparing and delivering voting supplies and equipment to the County's 4,963

[1] Final election results included 543,143 absentee ballots: 521,180 were mail ballots and 21,963 were ballots cast via touch screen voting at the nine early voting locations established throughout the County from October 16 through November 6.

voting precincts, recruiting and training 25,000 election day poll workers, preparing and mailing tens of thousands of absentee ballot packets daily and later signature verifying, opening and sorting 521,180 voted absentee ballots, and finally counting 2.7 million ballots is extremely challenging.

Types of Voting Systems

There are three types of voting systems currently certified for use in California.[2] These are punch card, optical scan and direct record electronic (touch screen) systems. Touch screens are the most state-of-the-art with three vendors' systems having been certified by the California Secretary of State (SOS) in 1999 and an additional vendor's touch screen system receiving certification in 2000. While there has been considerable discussion regarding the viability of Internet voting, to date no Internet systems have been certified for use in California. In early 1999, the SOS convened a year-long Internet Voting Task Force whose members issued a report in January 2000 advising a "go slow approach."[3]

I. Punch Card Voting

The computerized punch card voting system was developed in the 1960s to provide a fast and accurate method of tabulating ballots at a central location. There are two basic types: a single ballot Votomatic system with 312 numbered voting positions on the ballot card and an accompanying booklet containing candidates/propositions, and a multiple ballot Data Vote system with names of candidates/propositions printed directly on the cards. In California, 73% of voters currently cast ballots on punch card systems (see Attachment B). The 312 Votomatic system has been in use in the County since it was purchased in 1968.[4] Until introduction of the touch screen system for early voting at nine sites in conjunction with the November 2000 General Election, the punch card system was the sole system used in the County for both election day and absentee voting.

The punch card system has been continually and thoroughly maintained and upgraded throughout the 32 years of operational use in the County. The 37,000 Votomatic devices are individually inspected, worn components replaced, and chad cleaned out after every election. Additionally, in 1997 the RR/CC replaced the entire inventory of ballot card

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[2] Voting systems must be certified by California's Secretary of State (SOS) prior to use. The certification process is rigorous and includes a requirement to meet the hardware and software system standards established by the Federal Election Commission.

[3] With the encouragement of the SOS, four California counties, San Diego, San Mateo, Sacramento and Contra Costa, experimented with non-binding Internet Voting on a few electoral contests in conjunction with the November 7, 2000 General Election. A report of findings is anticipated within the next few months. State legislation to authorize Internet Voting failed last year but was reintroduced last month.

[4] More ballots were cast nationwide on punch card systems for the November 2000 election than any other system (approximately 33% of the 105 million ballots cast). Most large election jurisdictions vote on punch cards including L.A. County, L.A. City, San Diego County, Chicago and Cook County Illinois, Harris County (Houston), Texas, and Dade County (Miami), Florida. Data Vote systems are primarily used by counties with less than 250,000 registered voters (the exception is Orange Co., CA which is always the slowest CA. County to report vote totals on election night due to the need to count 5-7 ballots per voter).

readers at a cost of $500,000. The 36 new card readers accurately tabulated 2.7 million ballots at the RR/CC's Norwalk headquarters for the November 2000 election.

Strengths: 1) Low Cost: the most economical system to operate as ballot cards cost 7 cents each, the 37,000 Votomatic units in our inventory were paid for long ago, and maintenance costs, including replacement parts, are low; 2) Accuracy: reliably correct results are achieved (if voters cleanly punch out the chads and the equipment is well maintained); and 3) Familiarity: after three decades of use in the County, precinct workers and voters are accustomed to it. A silver lining to the national scrutiny of punch card voting during the aftermath of the November 2000 Presidential Election is that voter awareness has increased regarding the recommendation to check for loose chips (chad) after voting. Consequently, upcoming elections in the County[5] are anticipated to be virtually chad-free.

Weaknesses: 1) Slow Count: A drawback of punch card systems utilizing a central location for ballot counting is slower tabulation of results on election night (compared with in-precinct counting followed by relaying results to headquarters). Ballots from most of the 4,963 voting precincts in the County do not arrive at the tally center (RR/CC headquarters in Norwalk) until 10:30 p.m. or later. However, throughput of ballots counted per hour at peak periods between 11 p.m. and 2 a.m. reached an all time high of up to 600,000 ballots counted per hour, significantly outpacing past countywide elections; and 2) Incomplete Punches (Chad): Recently, much attention has been focused nationwide on punch card voting systems with regard to occasional instances of partially punched through ballot cards.[6] Also, punch card voting systems do not warn voters of possible mistakes such as overvoting (i.e. voting for more than one candidate in a contest where the instructions are to vote for one).

The Absentee and Provisional Ballot Factor

No matter what type of voting system is used, a significant number of absentee and provisional[7] ballots cannot be included in the election night totals. Many absentee voters wait until the last minute to mail their ballots or they drop their voted absentee ballots off

[5] These include the March 6, 2001 24th State Senate Special Vacancy Election (created when Sen. Hilda Solis won a congressional seat in the 11/7/00 Election) and local elections being conducted by 50 cities throughout the County on that date. Additionally, the April 10, 2001 consolidated election combining the 32nd Congressional District Vacancy Election (created by the recent death of Congressman Julian Dixon) with the City of Los Angeles' mayor/council election will be held using the punch card system.

[6] A punch card ballot that is cleanly punched out tabulates very accurately. Partial punches are caused by voter error (i.e. misunderstanding how to use the system) or equipment malfunction (i.e. broken punching stylus). Instructions included in absentee ballot packets AND posted at each of the 31,000 voting booths countywide advise voters to check for and remove any loose chips (chad).

[7] Provisional ballots are cast by voters whose eligibility to vote on election day at the polling places cannot be determined by the precinct official. Therefore, such ballots are placed in individual provisional ballot envelopes and each must be researched and verified prior to tabulation. For the November 2000Election, 100,168 provisional ballots were cast in the County, of which 61,521 were counted after completion of the verification process.

at polling places on election day. All of these ballots must be individually signature verified, sorted and opened prior to tabulation. For the November 2000 General Election, the number of outstanding absentee and provisional ballots added to the count in the days/weeks following the election exceeded one million of the 11 million total ballots cast in California (of which 186,000 were from L.A. County). Consequently, close elections, whether local contests or statewide, cannot be determined based solely on election night unofficial vote totals but must await the tabulation of late absentee and provisional ballots prior to official certification of results.

There are two main goals regarding ballot tabulation: speed and accuracy. Speed is achieved with the tabulation of unofficial totals on election night. Accuracy must await the completion of the entire vote canvassing process. In addition to counting the remaining absentee and provisional ballots, the canvass process also entails a manual tabulation of ballots from a randomly selected 1% of the voting precincts. This is required in order to compare manual vote tally results with the computer counts to verify accuracy of the tabulation software. The canvass also includes an audit process to reconcile the number of voters who signed in at each precinct with the number of ballots cast at each precinct. In recognition that the vote canvass is a labor-intensive, exacting and time consuming process, California law allows 28 days to complete the canvass prior to certification of accurate, official election results.

II. Optical Scan Systems

Variations of optical scan voting systems have been available since the early 1980s and are virtually unchanged today. They utilize large (10" X 20") paper ballots containing printed candidates' names and ballot propositions. Voters mark the ballots by filling in an oval or other designated space with a pen or pencil. Voted ballots are inserted into a large machine at each precinct. Absentee ballots are tabulated at a central location. The tabulation machines use lasers to read markings placed in the designated spaces.

Following the November 1996 General Election, I submitted a memo to your Board (dated January 28, 1997) on Alternate Voting Systems that focused on optical scan voting technology. Subsequently, an optical scan voting system demonstration was held at the Hall of Administration on February 25, 1997. I contended then, and reiterate today, that this type of voting system is a prime example of "one size does not fit all." These systems are primarily used by small and mid-sized counties (under 500,000 registered voters) and would be inappropriate for our County for the reasons outlined in Weaknesses below.

Strengths: 1) User-Friendly: Candidates names and measures are printed directly on the ballot; and 2) Faster Precinct Ballot Counting: Election night unofficial vote totals from the precincts are received more quickly as votes are tabulated at the precinct level (rather than at a central location) and then transmitted, via modem or memory data pack, to the central location for accumulated totals. As a result, approximately 95% of the precinct ballots would likely be tallied by midnight (compared with 50% by midnight with punch card voting). However, absentee ballot counting at the central tabulation site

using optical scan technology is slower than punch card tabulation (see explanation under Weaknesses below).

Weaknesses: 1) High Cost: the equipment is costly. The initial hardware and software purchase would cost approximately $32 million. Equally significant would be the ongoing expense of the large, optical scan ballots which are up to ten times more costly than punch card ballots; 2) Slow Absentee Ballot Counting: The large ballots are unwieldy and must be hand fed into central count readers for absentee ballot processing. The tabulation rate is unacceptably slow when counting a large numbers of absentee ballots (compared to the speed of the punch card system)[8]; and 3) Paper System: Like punch cards, it is a paper-based system prone to a percentage of voter error (i.e. circling or placing check marks next to voting choices instead of filing in the designated space, resulting in votes that cannot be read by the tabulating machine). Additionally, machines are calibrated to read degrees of ink/pencil darkness such that votes marked using a light pencil, red pen, etc. may not be picked up by the machine[9].

III. Touch Screen Voting Systems

Touch screen devices are the most state-of-the-art voting equipment, first certified for use in California in 1999. Touch screens have the capacity to display a virtually unlimited number of candidates, contests and ballot measures on a liquid crystal display similar to an ATM. The voter touches the screen in order to indicate his/her vote for each office or ballot measure.

Los Angeles County's Experience with Touch Screen Voting

On March 14, 2000, Supervisor Knabe introduced a Board motion instructing the RR/CC to report back to the Board with a plan to use touch screen voting in conjunction with the November 2000 General Election either at selected polling places or during the absentee voting period. The RR/CC submitted a preliminary feasibility report to the Board on April 10, 2000 and invited the three certified vendors to demonstrate equipment capabilities at the Hall of Administration on June 8, 2000. Following that demonstration, a vendor evaluation committee, comprised of representatives of the RR/CC, Chief Information Office (CIO), Internal Services Department/Information Technology Service

[8] Optical scan systems are not designed to count ballots from 500,000+ absentee voters as would be required in L.A. County. It is anticipated that a multiple number of large optical scan ballots would have to be issued to each voter, as was the case in San Francisco where three optical scan ballots were required per voter due to multilingual ballots (San Francisco converted from a single punch card ballot to the optical scan system and used it for the first time for the November 2000 General Election). Reputable election vendors all concur that optical scanning systems requiring such large ballots are unworkable in a jurisdiction the size of Los Angeles County with requirements for multilingual ballots. San Francisco, with 486,000 registered voters, spent $700,000 on optical scan ballots for the November 2000 election.

[9] The highest percentage of overvotes and undervotes in Florida occurred in an optical scan, not a punch card, county. Additionally, in a **statewide** recount for Superintendent of Schools in Colorado following the November 2000 election, the cumulative recount vote total differences in punch card counties was 10 votes while one optical scan county revealed a difference of 1,000 votes due to equipment not detecting voters' pen/pencil marks.

(ISD/ITS) and the Auditor-Controller (A-C), established selection criteria and subsequently unanimously selected Global Election Systems, Inc. as the touch screen vendor for the pilot project. A contract was finalized with Global on August 14 for equipment and support services.

The committee determined that the best approach for the initial touch screen program was to expand voter services during the early voting period (early voting is in-person voting at satellite locations during the absentee voting period). The committee established the requirements for the touch screen voting pilot project including the capacity to 1) allow any of the County's 4.1 million registered voters to go to any of the nine established locations to vote by touch screen during the three week period prior to election day; 2) accommodate all 263 ballot styles (i.e. combinations of contests/propositions) on each and every touch screen device; 3) display each of the 263 ballot styles in the voter's choice of seven languages[10]; and 4) accessibility to voters in wheelchairs and allowing visually impaired voters to vote privately without assistance (by use of audio headset and raised keyboard).

From July 13 through the end of October, weekly project status meetings were held. Numerous RR/CC staff, together with personnel from Global Election Systems and staff of the CIO, ISD/ITS and Auditor-Controller (in their roles as members of the touch screen evaluation committee) attended.

Meeting the Technical Challenge

Conducting an election in the County using a dual voting system for the first time required integrating punch card ballot layout and vote tabulation software with completely different touch screen ballot layout and results accumulation software. The challenge involved working with four different software vendors/providers. The process first required the ability to remotely access (at the nine touch screen locations) the entire 4.1 million registered voter database (VIMS). After checking VIMS data to determine if each touch screen applicant was registered to vote and had not already been issued an absentee mail ballot, a smart card (similar to a hotel key card) was activated by Global's software for issuance to the voter. When the voter inserted the smart card into any touch screen device, the appropriate candidates and ballot propositions for that voter's precinct appeared instantly on the screen. After voting, the smart card was disabled for that voter. Smart cards were reusable and were re-activated for subsequent voters.

To obtain all election contest data in the seven languages required complex software integration with the translation vendor (CTS). Each touch screen device had to be

[10] The federal Voting Rights Act requires a County to offer ballots and other election materials in any language that more than 10,000 respondents on U.S. Census forms completed stating they had limited English proficiency. Based on the 1990 Census, the required languages in Los Angeles County are Chinese, Japanese, Spanish, Tagalog and Vietnamese in addition to English. In September 1998, Korean was added to the list by the Board of Supervisors. It is anticipated that the 2000 Census will result in requiring the addition of several more languages.

programmed with 9 million ballot combinations[11]. Also, to provide the audio versions of all 263 different ballot combinations, so that blind and visually impaired voters could cast ballots without assistance, required Global to read and index all of the varied ballot combinations. To report touch screen results along with punch card absentee totals required Global to convert ISD/ITS' punch card software, written in completely different computer language, to Global's software. No touch screen vendor, including Global, had ever faced such a daunting task of election software integration among multiple vendors.

A thorough project plan was developed with critical "go/no go" deadlines established in order to assure that the touch screen project would only be continued if success was achieve at each step. All deadlines were met and all technical obstacles were overcome. The pilot project represented a major technology leap forward.

Logistics and Cost of Pilot Project

Site preparation, equipment deployment/retrieval and daily troubleshooting involved RR/CC technical staff and members of the Global project management team. Site selection criteria included availability of computer network access, telephone access, facility space, security, parking and voter accessibility. The nine touch screen voting sites included RR/CC headquarters and six RR/CC branch offices as well as two city clerk offices in Los Angeles and West Covina (for locations and number of voters at each site see Attachment C). Between 4-6 touch screen units, including one visually impaired touch screen device, were operational at each site. The hardware worked reliably with down time experienced on only two units for less than twenty minutes (no votes were lost or compromised).

Site staffing, training and development of instructional materials was the responsibility of RR/CC election operations management. To ensure familiarity with the complex voter database, the strategy relied upon deployment of well-trained permanent RR/CC employees whose positions were back-filled during this time by temporary employees. Extensive publicity and voter outreach was accomplished by RR/CC executive office staff including the PIO, student interns and temporary employees assigned to this new project.[12]

Touch screen voting began on October 16 and continued through November 6, including the last two weekends prior to the election. Each day the number of voters increased. A total of 21,963 voters cast their ballots on the touch screen system. As expected, the

[11] 263 ballot combinations multiplied by 4,963 voting precincts multiplied by seven languages resulted in over 9 million different versions available for presentation of the appropriate ballot to each voter.

[12] Information included in the sample ballot booklet was a key source of voter information, followed by information the media disseminated as a result of several department press releases and numerous interviews. Outreach with community based organizations proved pivotal as well, especially with regard to publicizing the unique capability for blind/visually impaired voters to cast their ballots without assistance. RR/CC staff met with 30 different visually impaired groups and partnered with the Braille Institute and the Center for the Partially Sighted to distribute touch screen voting information as part of their regular mailings to 8,000 clients. Similar efforts were undertaken with the League of Women Voters and numerous community groups.

majority of voters cast their ballots closer to election day. Fully 41% of the 21,963 touch screen voters cast ballots on the last three days prior to election day.

Final expenses for the pilot project are still being accumulated. At this time, the cost of hardware, support services, multiple vendor interfaces and additional staffing is estimated at $500,000.

Characteristics of Touch Screen Voters

We were able to determine some demographic and political affiliation characteristics of voters who chose to vote in the days/weeks prior to the election on the touch screen system. This was possible because touch screen voters, like absentee mail voters, were specifically designated as such on the voter file at the time of application to vote. The reason for this is to preclude the opportunity for a person to vote more than once (i.e. at the polls, by absentee mail and/or by touch screen).

The political affiliation of touch screen voters coincided virtually identically with the County's entire voter database. Countywide, 53.3% of registered voters are Democratic, 27.7% are Republican, 14.2% are non-partisan and 4.8% are registered with minor parties. The 21,963 touch screen voters consisted of 53.5% registered Democratic, 28.3% Republican, 14.3% non-partisan and 3.9% were affiliated with minor parties.

Touch screen (T.S.) voters tended to be somewhat younger than absentee (AV) voters who cast their ballots by mail. The chart below depicts the differences:

AGE	AV (MAIL) VOTERS	T.S. VOTERS
18-27	8%	10%
28-37	13%	21%
38-47	19%	23%
48-57	17%	20%
58-77	20%	11%
78+	8%	2%
unknown[13]	15%	13%

Voter Survey Results

Voters really liked using the new system as reflected by survey results (Attachment C). 9,296 of the 21,963 touch screen voters took the time to fill out the one page survey. Fully 99% of respondents said their satisfaction with touch screen voting was excellent or good and they would like to use this method again in future elections. Most respondents (58%) learned about the new system from information included in the sample ballot

[13] Voters who registered prior to 1976 were not required to provide birth date information but simply to affirm they were older than 18. Consequently, these voters on file are at least 42 years old and many are likely to be 60 or older.

booklet. Others learned about it from the media, community organizations, the Internet or were in government offices seeking other services and saw the large banners advertising the new service.

The majority of respondents (83%) indicated they waited between 1-10 minutes to vote. The touch screen device does not at this time accumulate information on how many voters chose to vote in a language other than English or used the audio headset available for the visually impaired. However, over 300 survey respondents indicated they voted in a language other than English and 139 said they used the visually impaired ballot station to vote using the audio headset. An informal tally by employees staffing each site revealed hundreds more chose these popular new features.

Strengths and Weaknesses of Touch Screen Voting

Strengths: 1) Fast ballot tabulation: When touch screen equipment is deployed strictly for early voting in advance of election day, votes are tabulated and results released along with the first absentee (mail) vote totals at 8 p.m. on election night. If deployed on election day in some or all voting precincts, each touch screen device accumulates vote totals on a hard drive and also redundantly on disk. Vote totals are then relayed to counting headquarters by computer modem or the disks are taken to one of several counting centers established countywide (Riverside County chose the latter process in instituting their countywide touch screen system for the November 2000 Election). When placed in every voting precinct, it would be anticipated that 95% of precinct election results would be available by midnight; 2) Accuracy: 100%, assuming thorough testing and no programming errors or equipment failure; and 3) User-Friendly: Voter surveys overwhelmingly reveal voters prefer touch screen voting over other voting systems; the system's capability to present the ballot in multiple languages, and in audio format for the visually impaired to vote without assistance, are desirable features for a diverse electorate; equipment is programmable to prevent overvoting (i.e. voters mistakenly voting for more candidates than allowed); and voters can easily review the entire ballot prior to casting their votes which alerts voters to undervoting (i.e. skipping a contest whether by intent or inadvertently).

Weaknesses: 1) High Cost: Initial hardware and software equipment purchase for a countywide system is estimated at $100 million (see cost breakdown at Attachment D). On-going hardware and software maintenance, including future upgrades or equipment replacement, is unknown but anticipated to be significant. Also, RR/CC staffing costs would be higher, including augmenting technical staffing and higher election day costs of roving troubleshooters and hiring more technically proficient poll workers[14]; 2) No tangible paper ballot: touch screen systems lack a voter "receipt" or other tangible ballot facsimile that could be examined by the voter and also be available in the event of a recount, dispute or computer failure (however, paper copies of ballot images from the

[14] Riverside Co. instituted a touch screen system countywide for the 11/7/00 Election, employing a vast number of election day troubleshooters, at a ratio of 1 troubleshooter assigned to monitor/assist 8 precincts compared with 1 to 75 in L.A. Co. for punch card elections. Additionally, although Riverside Co. extensively trained their precinct poll workers, approximately 20% flooded the phone bank seeking assistance resulting in late poll openings and halting voting at other times throughout election day.

touch screen devices can be generated for recount purposes); 3) Dual System: every voting system must have some type of paper ballot for absentee/mail voters who currently constitute 20% of the ballots cast in the County (25+% statewide). Consequently, in any election contest where the margin of victory is close, the results will still be unknown until the late absentee ballots (i.e. hundreds of thousands turned in by voters at the polling places on election day and those arriving by mail on election day) and provisional ballots cast at the polls have been signature verified, opened, sorted and counted in the days/weeks following election day until the official vote totals are certified; 4) Wary Voters: a small percentage of voters are wary of technology due to unfamiliarity with computers or desire to possess a tangible ballot. Although only 1% of the touch screen voter survey respondents cited these concerns in our pilot project, it should be noted that all of the pilot project voters made the choice to cast their ballots using the new system during the early voting period. If touch screens were installed in all voting precincts on election day, voters would be forced to use the new system (unless they chose to vote absentee by mail). Some complaints would be anticipated (as occurred to some degree in Riverside Co.); and 5) Limited Vendor Resources: the four touch screen certified election equipment vendors are small to mid-sized companies with limited support capabilities for their clients who all compete for vendor support and services at the same time of year.

RECOMMENDATIONS

Phase-in Touch Screen Voting: For the near future, it is recommended that the touch screen voting pilot project be expanded in conjunction with the early voting period for the 2001 and 2002 elections. As was pointed out in my November 6, 2000 memo to your Board, Dallas, Texas and Las Vegas, Nevada are two examples of electoral jurisdictions that introduced early voting on touch screens several years ago. Their experiences reveal that the popularity of this approach has grown so dramatically that between 20-40% of their voters, respectively, now cast ballots at early voting sites located not only in government offices but also in shopping centers.

It is anticipated that an ever-increasing number of the County's voters would take advantage of early voting on touch screens should that option be extended in future elections. In addition to enhancing voters' options of how and when to vote, it would reduce the number of voters at polling places on election day and stabilize, or perhaps lower, the high number of absentee ballots cast by mail. It would also result in speeding up ballot counting election night as touch screen votes cast during the early voting period are reported shortly after 8 p.m. on election night.

Establish a County Task Force: It is recommended that a Touch Screen Voting Task Force be established to formulate a plan of action to move toward the goal of replacing the punch card system at the voting precincts on election day. Initially, the Task Force would identify funding sources, develop a feasibility timeline[15], explore equipment

[15] Developing RFP criteria, vendor demonstrations and contract negotiations would undoubtedly be a multi-year project given the high cost of acquisition of sufficient equipment for a countywide implementation.

options, detail vendor selection criteria, etc. Task Force membership could include, at a minimum, staff from the Registrar-Recorder/County Clerk, Chief Information Office, Chief Administrative Office, Internal Services Department (Information Technology Service and Purchasing Divisions), County Counsel and a number of City Clerks.

Partnership with City Clerks: A strategy involving city clerks participation is essential to ensure that voters throughout the County have the opportunity to vote using the same voting system whether the election is conducted by the County or by clerks in the 88 Cities within the County[16]. Therefore, it is anticipated that purchase of new voting equipment would involve some type of financial support from the cities. Several cities have already expressed interest in the acquisition of new voting equipment.

The City of Los Angeles is considering leasing the County's current inventory of touch screen voting equipment, purchased in conjunction with the pilot project, to conduct early voting for the upcoming April 10 and June 5, 2001 City-conducted elections. Sharing the cost of expanding touch screen voting with the City of Los Angeles would build upon the foundation of the financial partnership that was forged in 1998, when the City contributed one third of the software costs of the RR/CC's conversion to the new Voter Information Management System (VIMS).

A phase-in approach to acquiring a new voting system is preferable due to several factors. These include the anticipated high cost of total system conversion and the fact that election expertise resides within only a few, small to mid-sized voting equipment companies that market equipment certified for use in California. Installing a new voting system countywide, such as was accomplished for the November 2000 Election by Riverside County (touch screen voting system) and San Francisco (optical scan system) strains vendor resources and support capabilities, and those jurisdictions are significantly smaller than Los Angeles County.

Additionally, technology is changing so rapidly that concerns have surfaced regarding equipment obsolescence. New voting system development plans have been announced recently by a coordinated Cal Tech/MIT team and also separately by Unisys in conjunction with Dell Computers and Microsoft. Several companies are also in various stages of development and marketing of Internet Voting Systems.

Also, several national task forces have been formed to study electoral reform and voting equipment options. I have been asked to serve on one assembled by the Election Center, a well-respected, non-partisan organization of state and local election officials based in Houston, Texas. These national task forces anticipate publishing recommendations by April 2001.

[16] Countywide, 73 cities conduct their own elections and tabulate their ballots at city halls while 15 cities consolidate their elections with County-conducted elections. The County plays a substantial support role in all city elections and the registered voter database is solely maintained by the RR/CC - using the database is required for production of precincts' rosters of voters, absentee ballot processing, etc. for city-conducted elections.

Numerous legislative proposals have recently been submitted, at the federal and state levels, dealing with electoral reform. Several of these propose financial assistance to counties for upgrading equipment.

This report has been docketed for oral presentation to your Board on January 30 at 10 a.m. Should you have questions prior to that meeting, please call me.

Attachments

C: Chief Administrative Officer
Executive Officer
Chief Information Officer
Auditor-Controller
County Counsel
Director, Internal Services Dept.
City Clerks