

Year 2000 Computer Problem

Background

The Year 2000 computer problem (Y2K) occurs because, in order to save memory and storage space in the computers, programmers historically used only the last two digits when recording years in the computer systems, i.e. "98" instead of "1998." This approach was taken to save space because computer processors and memory were considered to be very expensive. There was only so much space so why use up extra space by expressing all four digits.

Compounding the problem is the fact that much of the original programming was lost in antiquity. Punch card programs were transferred to magnetic tape programs, which were transferred to magnetic disks, which were transferred to computer chips. With all this transference of the original programming, it is impossible to know where the entire original programming shortcuts lay.

With thousands of programs and millions of lines of code, this "shorthand" saved considerable memory and made the two-digit year pervasive throughout most computer codes. Progress in technology produced less expensive computers with far greater memory but the original software dating strategies did not change.

As a result, computer systems of all kinds may not be able to distinguish 2000 from 1900 when processing, thus producing erroneous results or failing to function totally. Y2K problems exist in databases, software, and hardware, including non-computer related hardware (e.g., car clocks, security devices, lighting, sprinklers) and other systems with embedded date related code.

It is important to note that just recognizing the year as 2000 is not the total problem. Leap Year causes additional problems. Computer programmers have determined Leap Year by dividing the two digits by four (4). If the results were an even number, they would include February 29th in the program logic⁽¹⁾.

⁽¹⁾ *This rule has an exception. When a year is divisible by 100 it is not a Leap Year, but when the year is divisible by 400, then it is a Leap Year. So, 1900 was not a Leap Year and neither is 2100, but the year 2000 is a Leap Year. Few programmers knew about this exception to the exception. As a result, not all computers are programmed to recognize the Year 2000 as a Leap Year. Consequently, we may not see all of our Year 2000 computer problems on January 1, 2000. Some computers will not begin to misbehave until February 29, 2000.*

Although this problem exists worldwide, this Grand Jury Report will include only Departments and Agencies, Special Districts, Cities, and Joint Powers within Ventura County.

The focus of this report is to consider the potential effects of the Year 2000 problem on Ventura County and Cities within the County and to assess the plans of these entities to mitigate possible problems.

Methodology

Information was obtained through interviews with the County and/or City Directors of Information Systems; Year 2000 Program Managers, Project Managers, and City Managers; and attendance at the County “kickoff” meeting and two Information Technology Committee meetings. In addition, monthly program reports, project status reports, and websites (where they were available) were reviewed as vehicles to monitor progress.

Findings

VENTURA COUNTY GOVERNMENT

Based on the recommendations contained in the Ventura County Auditor-Controller’s report dated June 30, 1998, on the County’s Year 2000 efforts, a draft policy addressing the issues in the Audit report and delineating Countywide responsibilities for resolving the Y2K problems was prepared by Information Systems Department (ISD) for possible adoption by the County Information Technology Committee (ITC) and the Board of Supervisors (Board). The Policy was approved by the Committee in August 1998 and by the Board in March, 1999.

The Policy included a six-phase process as follows:

- | | |
|-------------------------------|----------------------------|
| 1. Risk Management | 4. Remediation and Testing |
| 2. Inventory and Prioritizing | 5. Implementation |
| 3. Assessment | 6. Contingency Planning |

In addition, a list of the systems impacted and requiring review and attention was included. In general, the systems involved are:

1. Large scale traditional information systems supported and maintained by ISD.
2. Large scale traditional information systems supported and maintained by individual agencies or departments.
3. Departmental local area network (LAN) and PC desktop-based systems and applications purchased, developed, and supported by departmental staff.

4. Embedded systems residing on microchip processors contained within various equipment owned and operated by the County, its individual agencies and departments.

To support and coordinate the overall project management and status reporting activities associated with the project areas, the County established and funded a Y2K program office staffed by a dedicated program manager, and project teams, all reporting to the County Information Technology Committee. Proposed milestone dates were established for completion of the various phases as follows:

- Completion of departmental risk assessments September 30, 1998
- Completion of departmental surveys October 30, 1998
- Completion of remediation June 30, 1999
- Completion of contingency plans June 30, 1999

A kickoff meeting was held September 15 & 16, 1998 for all Agency/Department Heads and City Mayors/Managers. The purpose of the kickoff meeting was for ISD to inform all the County Agencies/Departments and City Mayors/Managers the problems involved in making computer-distributed systems and embedded chips Y2K compliant.

Responsibilities for the County Year 2000 remediation activities were organized along three lines and associated projects:

1. ISD is responsible for centrally maintained computer, data communications, and telephone systems remediation and contingency planing.
2. Individual agencies and departments are responsible for LAN, PC desktop, and embedded computer systems remediation and contingency planning.
3. General Services Agency (GSA) is responsible for County facility related computer and embedded computer systems remediation and contingency planning. A survey (Inventory) was made in each of the three general project areas to determine the number of units and systems involved and the magnitude of the problem in becoming Year 2000 compliant.

The Policy divided the Year 2000 Program into five projects and required each project manager to report monthly on the progress of her/his project in the established County's Project Status Summary format to the ITC (*See Figure 1*).


		<p>County of Ventura Year 2000 Program Office</p> <p>PROJECT STATUS SUMMARY</p>
Project Title:		Report Date:
Project Manager:		Status as of Date:
YES	NO	SUMMARY STATUS INFORMATION <i>(see following sections for details)</i>
		Project On Schedule
		Project Within Budget
		Project Plan Changes or System Scope Changes Due for Review, Resolution or Approval
		Project Deliverables Require Customer Department Review and Approval
		General Issues Pending for Discussion
Schedule Details:		
1.		
Budget Details:		
Original Project Estimated Cost:	AS OF ABOVE STATUS DATE:	
Project Estimated Hours:	Project Costs Through	:
Current Project Work Completion Percentage:	Hours Expended to Date:	
	% of Orig. Est. Cost Expended:	
	Total Revised ETC Cost:	
Plan or Scope Change Details:		
1.		
Deliverables Ready for Customer Department Review:		
1.		
General Issues		
1.		

Figure 1. Ventura County's Y2K Project Status Summary Format

Following is the status reported for each Project as of March 31, 1999:

- | | |
|---|--------------|
| 1. Central ISD Supported Applications | 76% complete |
| 2. Central ISD Computers & OS Software | 60% complete |
| 3. Telecommunications Y2K | 64% complete |
| 4. Year 2000 Departmental Desktop Systems | 37% complete |
| 5. Year 2000 Departmental Embedded Chips | 55% complete |

The Central ISD Supported Applications Project Team has completed Phases 1 through 4 and most of the remediation part of Phase 5 and also is in the process of developing plans for testing in Phase 5. The Central ISD Computer & OS Software Team has completed Phases 1 through 4 and is working on Phase 5 testing. Data Devices in the Telecommunications Y2K Projects are reported to be in the Testing Phase.

Of the forty departments/agencies with Desktop Systems, all have completed the Risk Assessment Phase (Phase 1) and are in various stages of Phases 2 through 5 with thirty-six departments in the implementation phase (Phase 6).

Departmental Desktop Systems and Departmental Embedded Chips projects reported that the lack of resources and schedule conflicts caused these projects to be behind planned schedule.

In addition to the Project Status Reports, a Year 2000 Program Summary Status Report in the form of a milestone chart is made for the ITC and the Board (*See Figure 2*).

CITY GOVERNMENTS

Investigations were conducted at each City in the County to determine the status of their Y2K compliant program. The findings were as follows:

Camarillo

The City formed a committee to study and resolve areas of Y2K noncompliance in early 1998. The following City Departments are represented: Administrative Services, City Clerk, Planning, Finance, Public Services, and Engineering. The City Manager chairs the Committee. The City Council is advised of the status of the various projects in each Department monthly.

Each Department made an inventory list of their equipment and software and determined what effort and/or changes were necessary to become Y2K compliant. The latest status report for all Departments was made in late February 1999.

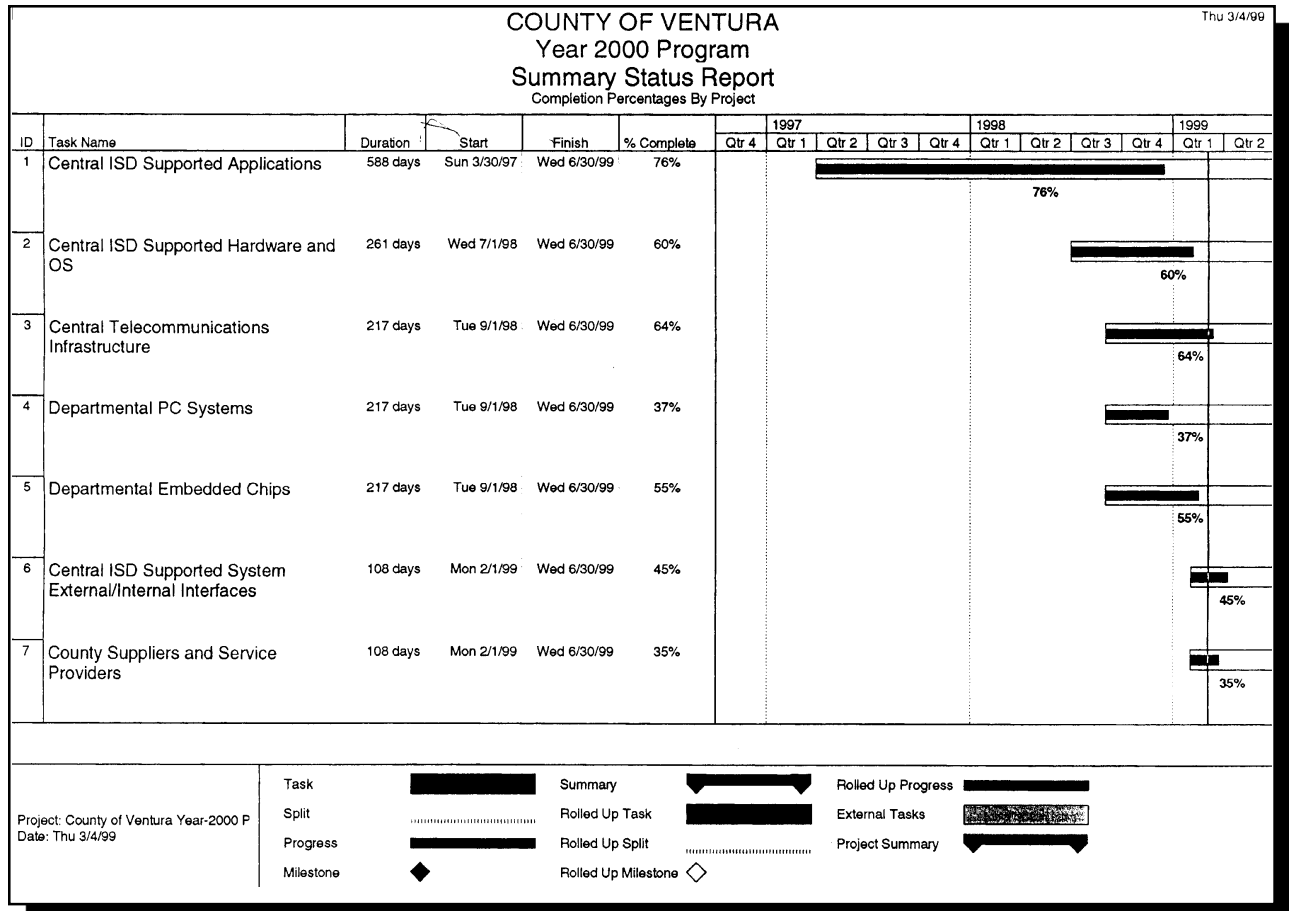


Figure 2. Ventura County's Y2K Project Status Report Format

Y2 NEEDS ASSESSMENT

Contact Name: _____ Name of Mission Critical System: _____

Department/Division/Program: _____ Priority: _____

Please describe your mission critical system:

What is your strategy or approach for makin this Y2K compliant?

Please address other applicable questions and issues: (please refer to page 2 questions #3 - #10 of November 19, 1998 memo)

Figure 3. Ventura County's Y2K Need Assessment Format

With the acquisition of the HP3000 Computer and Pacific Software, which was determined to be Y2K compliant, a large number of potential problems were eliminated. In addition, when the new telephone system scheduled to be installed in June 1999 is implemented, the communications systems will be compliant. Itron Meter Reader System hardware and software and interface with the HP3000 are expected to be made compliant in late June 1999. Public Services Work Management System has installed new Y2K compliant software and data conversion will be completed in April. Public relations programs are still in the works with no estimate of percentage of completion but the City Manager is confident that it will be ready well before the new year.

Fillmore

The City formed a Y2K Program Committee, which consists of the Fire Chief, City Engineer, Public Works Superintendent, Chief of Police, Community Services Director, Assistant Finance Officer, OMI Manager and Finance Officer. The Committee meets monthly to report progress. A monthly status report is made to the City Council. Each member is charged with the responsibility of reviewing the area assigned to him/her and prioritizing according to mission critical issues, safety issues, and disruption of service.

Following is the status of Y2K compliance of the computer equipment at City Hall:

EQUIPMENT	%COMPLETE	COMPLETION DATE
Novell Server (1)	90	12/31/99
NT Servers (2)	90	12/31/99
Desktop PC's(30)	50	8/31/99

Financial Accounting Software (Eden System) is compliant as of August 1998. Progress status for equipment with imbedded chips has not been determined as of this writing. A public relations program is planned but no work has been done.

Moorpark

The City's local area network (LAN) is on a Dell 4200 computer. An upgrade of all the computer operating systems has been made. The upgrade versions are certified by the computer manufacturer to be Y2K compliant. Windows NT Pack 4 and Y2K patches have been installed which allow the operating system to function correctly in the year 2000. Each model computer has a had rollover test performed to ensure that the computer can recognize the year 2000 as a four digit year and that it is a leap year.

The City uses two network servers (HP 6-450s) which were purchased in 1998 and have manufacture's certifications for compliance. New accounting software was purchased with certification to be Y2K

compliant and insurance protection by the software Company. Although Excel is Y2K compliant, desktop users are instructed to use a four digit year when using Excel.

An inspection of all equipment containing embedded chips was made by each department to determine compliance. It was determined that the equipment was not year sensitive.

Contingency plans have not been developed.

Ojai

At the regular January 1999 City Council meeting, a Y2K presentation was made by the Captain of the Ventura County Sheriff Ojai Substation. He outlined the problems and listed some of the results of not being Y2K compliant. In addition, he presented a Personal Y2K Preparedness Checklist, which was fashioned after the American Red Cross list.

A Y2K Task Force was formed in February 1999. Each member of the Task Force was charged with the responsibility for making a survey of the area assigned to determine where computers and various equipment were not Y2K compliant.

In addition, The Task Force is responsible for developing a program to assure that the various changes are made. Members of the Task Force included City department heads, utility companies representatives, emergency personnel, public safety agencies (fire, sheriff, etc.), County agencies, American Red Cross and banks.

This group is also responsible for the development of clear public information and contingency planning. A meeting of the group was held on March 4, 1999 to review the status of the Y2K preparedness program. Monthly meetings are scheduled to monitor the progress. Although no target date has been set for the completion of the various projects, the City Manager is confident that the problems will be resolved before year-end.

The City's main system control is an IBM A/S400 with 12 desktop PC computers. Windows 95 or 98 is the software in the PC's. All computer systems are considered to be Y2K compliant.

Oxnard

The City Manager established a Y2K Committee in October 1998 with a mission to make sure the City is prepared for the Year 2000. The Committee has 20 members chaired by the Assistant City Manager. Each member was assigned to one of three subcommittees.

Subcommittee A was given the responsibility to review Information Services, Library, Finance, City Clerk, and Fire Dept.

Subcommittee B is responsible to review Public Works & Police Dept.

Subcommittee C's area of responsibility is Recreation & Community Services, City Treasurer, Community Development, City Attorney, and Housing.

One of the first tasks of the Y2K Committee was to assist all departments/divisions/programs in identifying any potential Y2K problems and ensuring that they all take corrective action as necessary within the next year. The Y2K Committee meets weekly to report status and discuss problems.

Each department/division/program prepared and submitted a "needs assessment" for their respective areas to determine "mission critical systems" (see *Figure 3*). A checklist was included with the needs assessment form to assist the departments/divisions/programs in preparing the assessments (see *Figure 4*).

The City upgraded its computer hardware in 1997 to an IBM AS/400 system. One of the requirements of the contract with the supplier was that the hardware and software be Year 2000 compliant. A consultant was retained to install the computer and software and perform tests to verify that the terms of the contract were met. The desktop computers have Windows 95 or 98 software which are not Y2K sensitive.

Contingency plans are in the process of development and are targeted for completion in November 1999. A Y2K disaster preparedness handbook is being drafted by the Y2K Committee and will go to print in April or May 1999.

The Committee met with the City Public Information Officer and Community Relations staff to discuss distribution of information to the public and the methods to use. In addition, as a means of keeping the citizens informed of the City's progress of Y2K preparedness, information will be developed and added to the City web page.

Port Hueneme

Port Hueneme City Clerk reported that a Committee of representatives from each of the City departments was formed to study the existence of Y2K problems and determine the effort necessary to become Y2K compliant. The Committee meets monthly and reports to the City Council when requested and for funding approval.

No formal plans were presented during the Grand Jury visit with the City Clerk.

The City Clerk commented that a public relations program was a good idea and that a program would be developed before year-end. Also, contingency plans need to be developed.

The City systems are driven by a Novel network and 55 PCs. The PCs software is Windows 95 or 98.

EMBEDDED CHIP DEVICES YEAR 2000 CHECKLIST

INFRASTRUCTURE

- Air Heater
- Air Cooler
- Electrical Power Plant
- Chillers
- Programmable Thermostat
- Elevator
- Escalator
- Robotics
- Humidity Control
- CO2 Level Monitor
- UPS
- Generator
- PDU
- Power Management System
- Lighting
- Emergency Lighting
- Water Heating
- Water Cooling
- Water Purification
- Water Detection Systems
- Halon Release System
- Other Fire Extinguisher
- Fire Alarm
- Sprinkler System Internal
- Sprinkler System External

TELECOMMUNICATIONS

- Multi-function Telephone
- Digital Phones
- Multi-line Phone
- Cellular Phone
- Pagers
- Answering Machine
- Fax Machine
- PBX
- Standard Desk Phone
- Switch
- Satellite Equipment
- Microwave Equipment
- Server
- Router
- Automatic Call Distribution
- Interactive Voice Response
- Predictive Dialer
- Terminal

MEDICAL

- Pace Maker
- Hearing Aid
- Monitoring Devices
- Fluid Control Devices
- MRI Devices
- X-ray
- Ventilators
- Heart Difibrillators
- Fetal Monitors
- Patient Information Systems
- Patient Monitoring Systems
- Pharmaceutical Control
- Pharmaceutical Dispensing Equipment
- Bar Coding Equipment
- Surgical Equipment
- Emergency Room Equipment
- Inventory Control
- Instrumentation Systems
- Alarm Systems

OFFICE

- VCR
- Personal Computer
- Refrigerator
- Television
- Stereo
- Any Modern Appliance
- Copier
- Scanner
- Printer
- Clock
- Time Clock
- Timer
- Microwave Oven
- Scale
- Mail Inserter
- Postal Meter
- Mail Sorter
- Optical Reader
- Bar Code Reader
- Lab Equipment
- Check Writer

SECURITY

- Secured Gate
- Secured Door
- Vault
- Camera
- System H/W
- System S/V
- Door Control
- Badge Reader
- Guard Station
- Software Applications
- Man Trap
- Safe
- Metal Scanner
- Traffic Control Equipment
- Encryption Device

TRANSPORTATION

- Car
- Truck
- Electric Car
- Airplane
- Motorized Wheel Chair
- Boats

NETWORK (DATA)

- Hubs
- Routers
- MDUs
- Communication Interface Units
- Bridges
- Firewalls
- Servers
- POS Equipment

MISCELLANEOUS

- Cafeteria Equipment
- Vending Machine
- ATM
- Projector
- LED Panel
- Video Conference Equipment
- Speaker Device
- Camera
- Check Scanner
- Credit Card Scanner
- Cash Register

Figure 4. Y2K Checklist Format

Santa Paula

A Y2K Committee was formed in February 1999 to inventory all areas for possible Year 2000 problems. The Fire Chief was selected as the chairperson of the Committee. Other members include representatives from Public Works, Police Dept., and Finance. Phase One of the program was to make an inventory list of all the items for each area indicating whether or not there would be a Y2K problem.

The following were found to be non-compliant:

- Firepoint Software—current version is not Y2K compliant but the supplier has given assurance that a compliant version would be ready before year-end.
- Supervisory Control And Data Acquisition system (SCADA) hardware—in the process of being verified Y2K compliant.
- Computer Aided Dispatch (CAD) Software—upgrade funding was requested at the City Council meeting in February 1999.
- Dispatch Equipment—new Y2K compliant equipment will be delivered in April 1999.

Internal procedures, staffing, supplies, etc., in the Police Dept. are to be addressed in Phase Two of the program. In addition, work will continue in this phase to change those areas that are not Y2K compliant. Development of contingency plans and testing of equipment will be done in Phase Three of the plan. Some work in these areas has been done during the inventory and review phase.

Simi Valley

A status report on Year 2000 computer problems was made to the City Council by the Director of the City General Services Department in February 1998. It was reported that the programming of the changes to the Financial Management Information Systems was completed in February 1998. All other in-house and vendor software programs were being reviewed for Y2K compliance with projected completion by 1998 year-end. Status and priority reports are made monthly to the City Council.

The City utilizes a variety of other applications through licensing arrangements with specific vendors. These applications include the Graphic Information System (GIS), Police Dept. Records Management System (RMS), Computer Assisted Dispatching (CAD) software, and Public Works Supervisory Control and Data Acquisition System (SCADA). A Hewlett Packard UNIX operating system is used in GIS and RMS systems and a Novell operating systems is used in the City-wide network. Both systems are reported to be Y2K compliant by the software vendors. The City

has requested verification and warranty from each of these vendors regarding Y2K compliance of their software.

In March 1999 a Public Task Force was formed to address Y2K problems among the various public agencies and other public providers of essential services and their preparedness to handle the problems. The Task Force is comprised of appropriate staff members from the respective organizations with the members making periodic status reports to respective Boards/Councils regarding the efforts of their Committee.

The following are the efforts to-date:

- Developed inventory of all hardware, software, and systems supported by the City which could potentially fail due to the Y2K problem.
- Contacted manufactures of hardware/software/systems to determine the status of Y2K product compliance.
- Implemented programming changes.
- Established a test laboratory and began testing hardware and software to verify Y2K compliance.

It is the City's goal to achieve and verify through testing Y2K compliance on all critical applications and systems by July 1999.

As a means of keeping the public informed of the progress of its efforts in preparing for the Year 2000 change, General Services is in the process of developing information to be placed on the City's web page.

Thousand Oaks

A program to upgrade the computer systems to be Y2K compliant was started in 1996. Since then the Finance Department and Public Works Department have been updating and replacing systems that are not Y2K compliant. A Citywide Y2K compliance committee was established to coordinate department efforts.

Accomplishments to-date are as follows:

- Testing of all models of personal computers is complete.
- Replaced older 486 model computers and completed systems testing.
- Updated all City software and hardware to the IBM AS/400.
- Completed inventory of systems and embedded chips.
- Verified Y2K compliance of air conditioning, building access, elevator systems, and traffic lights.
- Completed inventory and testing of all programmable logic controllers, samplers, and flow meters at wastewater treatment plant.
- Upgraded fueling equipment, transit computer, and fleet operations.
- Upgraded main card catalog system in library.

Some work still needs to be completed in the Public Works Dept., Finance Dept., Library, Theaters, Community Development Dept., City Attorney's office, City Manager's office, and City Clerk's office. Testing of all computer systems is scheduled for completion in May 1999.

Public Works Department is in contact with public utilities providers to ensure that each company has taken the necessary steps to avoid interruption of service. City staff continues to meet with the County Office of Emergency Services, Police and Fire Departments, and area public agencies to address emergency preparedness priorities.

As part of contingency planning the City will distribute brochures, place information on the City website, develop an informational video for local TV channels, and has scheduled a free public forum on May 11, 1999.

Ventura

Since mid-1998 the City has been addressing the Year 2000 problem as it may impact City operations since mid-1998. A Y2K Committee was formed comprised of a representative from each of the City departments and chaired by the Director of Management Resources. Members of the Committee were assigned the responsibility for the inventory in their respective areas and to start testing all systems by April, 1999. The committee meets bimonthly. Following staff changes in the Communications Services Division, a Citywide team was formed and an inventory was conducted. The inventory reflects and segregates the hardware and software that is or is not Y2K. A consultant was retained to verify the inventory and provide a status assessment of the City's progress in the program.

A VAX computer is the driver and manager of the systems network. Recent acquisition of new and updated hardware and software has made most of the City's systems Y2K compliant. Some of the areas where the inventory indicates that the systems may not be compliant have not been tested or the City has not received written verification from the manufacturer. The City's conversion to a PC LAN-based network and Windows NT servers has been with an eye to purchasing new hardware and software which is Y2K compliant.

A report dated March 10, 1999, indicated that there were concerns about whether there was sufficient staff in the Information Systems Division to handle the day-to-day workload and solve the Y2K problems for the departments assigned.

Manufacturers' verification for all systems have not been received which hinders testing in those areas and limits finalizing contingency planning.

For those items of hardware and software that have been certified, the City plans to run pretests to ease the crunch at the deadline date. The City has targeted Mid-1999 to have all the necessary changes completed.

Disaster and contingency planning have begun but are not complete as of the end of March 1999.

Conclusions

The County and all ten Cities are keenly aware of the Y2K problem and all have implemented plans to anticipate and correct the potential problem. However, the study revealed that the County and Cities have not completed the activities necessary to become Y2K compliant.

The stages of preparedness vary from just completing an inventory to finalizing contingency plans. A status stating "percent complete" is suspect. Some started as early as 1996 forming plans and making changes while others did not make solving the Y2K problems a priority item until 1999.

Reasons given for delaying work on the problem are: lack of resources because of day-to-day demands on facilities and personnel, lack of funds because of budget restraints, and recent acquisition of new hardware and software.

Successful programs will contain a minimum of six (6) phases or steps: 1. Awareness (internal and external), 2. Inventory, 3. Assessment of costs, risks, and contingencies, 4. Prioritizing, 5. Remediation and/or Implementation, and 6. Testing.

These steps should be applied to mainframe systems, PC's and LANs. and embedded systems. Of all these systems, embedded systems are probably the most elusive because of the wide area involved. They impact heating, ventilation and air-conditioning units, security systems, electronic door locks, elevators, and many other mechanical devices.

Status reporting is a vital part of a successful program. Part of all of the programs reviewed lacked a formal status report made to high level management each month (as a minimum).

Time is of the essence requiring preparation for the Year 2000 to start early. The length of time required varies by agency, department, district, industry, and City depending on size, equipment, systems, and programs. This deadline differs from a deadline for most projects, reports or budget expenditures. In the case of the Year 2000 project, there can be no forgiveness about deadline. Work and successful testing on critical programs must be completed by December 31, 1999.

Six (6) of the Cities had nothing in their reports supplied or in the interviews conducted about the problems that may develop on February 29, 2000 (Leap Year).

To mitigate against any business disruptions caused by Year 2000 problems, an important element in being prepared is assurance that the suppliers of vital services and commodities are prepared for the change in advance of the year end. Any failure on their part makes in-house efforts ineffectual in that area.

Ventura County's program to solve the Year 2000 problem addresses all six steps and can be a good model for those Cities which are in the process of developing their programs. For emergency preparedness, the American Red Cross has published an outline of information including a check list to be considered when preparing for the Year 2000.

Other good sources for information and models are the following Websites:

- ITAA Year 2000 site: www.ita.org/year2000htm
- State Year 2000 sites: www.state.or.us/IRMD/y2k/other.htm
- Yahoo Year 2000 website: headlines.yahoo.com/Full_Coverage/Tech/Year_2000_Problem.

Recommendations

- R-1 City Councils and Managers should monitor the progress of the programs to become Y2K compliant by insisting on, at minimum, monthly written progress reports.
- R-2 Any area that can not perform the necessary tasks to keep on target to complete compliance before Year-2000 because of lack of equipment or personnel resources should receive management assistance immediately.
- R-3 Contingency Plans must be finalized no later than November 1999.
- R-4 All computers must be checked for handling the Leap Year calculation in-house and at suppliers prior to year end.
- R-5 All equipment suspected of containing embedded chips should be examined and modified where necessary no later than November 1999.
- R-6 Testing should be done as soon as the item is determined to be Y2K compliant to avoid a "log jam" during the last minute rush at year-end.
- R-7 Start public relations programs no later than September 1999.

- R-8 Make a survey of suppliers of critical services and equipment to determine if Y2K compliant.
- R-9 It is recommended that the 1999-2000 Grand Jury continue monitoring the progress of the County and Cities Y2K programs through February 2000.

Responses required

Agencies are to respond to this report in accordance with the following matrix keyed to the above recommendations.

AGENCY	R1	R2	R3	R4	R5	R6	R7	R8
County								
CAO		✓						
ITC/ISD		✓	✓	✓	✓	✓		
City Councils/ City Managers								
Camarillo			✓	✓		✓	✓	✓
Fillmore			✓	✓	✓	✓	✓	✓
Moorpark			✓	✓		✓	✓	✓
Ojai			✓	✓	✓	✓	✓	
Oxnard			✓	✓		✓		
Port Hueneme	✓		✓	✓	✓	✓	✓	✓
Santa Paula	✓		✓	✓	✓	✓	✓	✓
Simi Valley				✓				
Thousand Oaks				✓				
Ventura		✓	✓	✓				

Responses to Report



MOORPARK

799 Moorpark Avenue Moorpark, California 93021 (805) 529-6864

02 June 1999

Honorable Charles Campbell
Presiding Judge of the Superior Court
Ventura County Hall of Justice
800 S. Victoria Avenue
Ventura, California 93009

RECEIVED
JUN 07 1999
[Signature]

Dear Judge Campbell:

RE: Response to the 1998-1999 Ventura County Grand Jury Report
Year 2000 Computer Problem

Pursuant to Penal Code Section 933.05, the City of Moorpark is providing the following response to the aforementioned Grand Jury report.

Please note that the City of Moorpark uses only one server as the network server, the Dell 4200. The City has a separate HP6-450 server used only for the financial accounting software. The finance server and the accounting software have been independently certified as Y2K compliant by someone other than the supplier. The network server has also been tested by the vendor and staff to be compliant.

Recommendation R3: As to a contingency plan, the City has established a program that requires the files and programs on both servers to be fully backed-up on a weekly basis. The City plans to have both servers backed-up on December 30, 1999, the City's last workday of the calendar year. The tapes will be duplicated and retained on and off-site. Should any difficulty occur with the computers, they can be readily reset and the programs and files downloaded for operation. The City's computer technician will be available after January 1 to correct any problems that may arise prior to City Hall opening on the 3rd.

Recommendation R4: The software used by the City recognizes the Leap Year calculation. Critical suppliers that are Y2K compliant are being asked to provide assurance on the Leap Year issue.

Recommendation R6: Testing has been completed on City computers.

Recommendation R7: Information on Y2K has been in place on the City's website. Also, brochures have been available at City Hall and the Police Resource Center.

Recommendation R8: Service critical vendors with whom the City deals, such as the payroll processor, bank and security company, have indicated their Y2K compliance.

Should you have any questions, please contact John E. Nowak, Assistant City Manager at 805.529.6864 extension 215.

Respectfully,

[Signature of Steven Kueny]

Steven Kueny
City Manager

CC: Grand Jury
Honorable City Council
John Nowak, Assistant City Mar

PATRICK HUNTER Mayor CHRISTOPHER EVANS Mayor Pro Tem CLINT D. HARPER Councilmember DEBBIE RODGERS Councilmember JOHN E. WOZNIAK Councilmember

CITY OF SIMI VALLEY



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June 14, 1999

Honorable Charles Campbell
Presiding Judge of the Superior Court
Ventura County Hall of Justice
800 S. Victoria Avenue
Ventura, CA 93009

Dear Judge Campbell:

The City of Simi Valley has received the Grand Jury report titled: *Year 2000 Computer Problem*. On behalf of our City Council, I am pleased that the City of Simi Valley received such a positive report regarding our efforts to remediate the effects of the "Year 2000" (Y2K) date problem. We have taken the Y2K problem very seriously and have devoted significant resources to address it.

The City concurs with the findings reflected in the Grand Jury report. With respect to Recommendation R4 (page 14 of the Grand Jury report), the City is also testing Leap Year processing for the year 2000. Computer systems successfully tested include our financial system, personal computers/network, and embedded systems such as building security systems and equipment located at our Sanitation Plant. To date, the only problem identified involved equipment at the Sanitation Plant, which has now been corrected.

The City will continue to strive toward our goal of reviewing all systems and services with a potential Y2K problem, and correcting any critical problems identified by June 30, 1999. Naturally, our overall objective is to ensure uninterrupted services to our citizens and staff as we move forward into the new millennium.

Sincerely,

Bill Davis
Mayor

cc: Marvin J. Reeber, Grand Jury Foreman

BILL DAVIS
Mayor

PAUL MILLER
Mayor Pro Tem

HARRIET WILLIAMSON
Council Member

CLEN T. BELLERHA
Council Member

STEVEN T. SOJKA
Council Member



CITY OF OJAI

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P.O. BOX 1570/OJAI, CALIF. 93024
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OFFICE OF THE MAYOR

RECEIVED
JUN 10 1999
MSR MR

June 10, 1999

Honorable Judge Charles Campbell
Presiding Judge of the Superior Court
Ventura County Hall of Justice
800 S. Victoria Ave.
Ventura, CA 93009,.

SUBJECT: Ventura Grand Jury Year 2000 Computer Problem Report Dated 5/18/99

Dear: Judge Campbell

We appreciate the thoughtful report and recommendations prepared by the Grand Jury relative to the Year 2000 Computer problem.

This letter is submitted in response to the findings with respect to the City of Ojai. Our response to the various findings and recommendations is listed below.

R-3 Contingency Plan:

Concur. The City is working with the Ventura County Sheriff's Department on contingency planning. We have already surveyed preparedness status and contingency plans for key service providers. Meeting the November 1999 date is planned.

R-4 Leap Year Check

Concur. We will reconfirm that City computers are compliant with the Leap Year calculation.

R-5 Embedded Chips

Partially Concur. To the best of our knowledge we have checked such systems. We will reconfirm. We are also working with CalTrans to verify that traffic signal systems are compliant.

R-6 Timely Testing

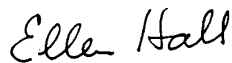
Concur. To the best of our knowledge testing is complete, but we will reconfirm in connection with recommendation R-4.

R-7 Public Information

Partially Concur. The City has already implemented a public information program. Meetings with key service providers were held in March and April. We participated at the Thousand Oaks roundtable in May. Currently the City is developing a local "preparedness" brochure for distribution via the Neighborhood Watch program and a local Y2K volunteer committee. By September this program will be underway.

Please contact our City Manager, Andrew Belknap with any questions. Again, we appreciate the proactive steps of the Grand Jury to study the Y2K issue and provide preparedness recommendations.

Sincerely,



Ellen Hall,
Mayor

c Ventura County Grand Jury