

TO: JAMES L. APP, CITY MANAGER  
FROM: DOUG HAMP, CHIEF EMERGENCY SERVICES  
DAVID MCCUE, INFORMATION SYSTEMS MANAGER  
SUBJECT: YEAR 2000 CHALLENGES  
DATE: May 18, 1999

**Needs:** For the City Council to discuss the City's efforts to ensure Year 2000 (Y2K) compliance.

**Facts:**

1. Computer-reliant operations, equipment and systems may fail at year 2000. Computer-reliant providers of City services may be unable to perform.
2. Computer-based System failures could disrupt City services and/or result in calls for City emergency services.
3. In this context, Y2K challenges are not significantly different from other disaster planning efforts.
4. Over the last several years, the City has enhanced its ability to deal with major incidents and disasters.
5. The City has been working to ensure that "mission-critical" systems are made compliant before Jan 1, 2000.

**Analysis  
And**

**Conclusion:** There are three areas of challenge confronting the City in assuring that computer-controlled systems are Y2K compliant:

1. Business process applications and systems. Includes software and hardware used for daily business operations such as desktop workstations, file servers, printers, and operating system software. These include "off-the-shelf" software like Office 97 which provide basic communication, report production and data compilation support; and, major systems like public safety, permitting and finance.
2. Process and control systems. "Embedded" software and hardware for facilities and equipment, such as HVAC systems, telecommunications systems (telephone, voice mail, data communications), security systems, traffic signals, process control systems at water treatment and wastewater reclamation plants, vehicle fuel pumps, street lights, radio communications or telemetry systems.
3. Data exchanges with other organizations. Electronic information to/from other agencies. Examples include investments, banking, Public Employees Retirement System, payroll deposits, wire transfers and law enforcement information. In short, the City relies upon electronic data from other agencies for a number of "mission-critical" operations, and they rely upon it from the City.

In January 1999, the City began identifying critical services that may be impacted, such as water delivery systems, wastewater conveyance and disposal, as well as Public Safety vehicle/fleet fuel needs. Key recommendations and steps to ensure that all "mission-critical" computers, software, special applications, data communications and control systems are compliant by September 30, 1999 were developed. In addition, community awareness plans were developed to address system shutdowns. The attached report summarizes the City's Y2K plan.

The good news on this issue is "90% of Y2K related failures will be resolved within 72 hours of occurrence" (According to the Gartner Group, considered the worlds leading authority on information technology).

They also "urge individuals to take a long-term view of the issues. Preparing for the new millennium should be much like preparing for a storm that will last less than a week...Individuals should prepare for limited duration, localized failures of services and infrastructure rather than an apocalypse. "

Note: The Gartner Group offers a free -Year 2000 Risk Assessment and Planning for Individuals on the Internet located at <http://www.gartner.com/y2k>

**Policy Reference:** None

**Fiscal Impact:** The attached report summarizes estimated costs.

**Options:** A. Authorize staff to implement the identified Action Plan and adopt resolution to appropriate funds.  
B. Amend, modify or reject the above option.

**Attachment:** Year 2000 Preparedness Report for City of El Paso de Robles  
Resolution Approving Y2K Information Systems Upgrades

# Year 2000 Preparedness Report for City of El Paso de Robles

**The Problem**

The "Y2K" problem was created in the early days of computers, when space for memory was limited and expensive. To save space, computer programmers used 2-digit codes to designate a year (ex. 97), rather than using all 4 digits (1997). The two-digit code was also used in chips which are embedded in many devices that control processes, functions, machines (like cars), building ventilation systems, elevators, and fire and security alarm systems.

When the year 2000 comes, programs that have been coded with two-digit year codes will not distinguish between the years 2000 and 1900. If the program includes time-sensitive calculations or comparisons, results are unpredictable. No one knows what problems may occur, how widespread they may be, or how long they will last. The City of Paso Robles, like all institutions, is faced with the challenge of assuring that its computers and embedded chip technology recognize and process information containing dates from the year 2000 (Y2K) and beyond.

The City's approach to the "Y2K" challenge has been threefold: First, an organization-wide inventory of systems, and system Y2K status, has been compiled and prioritized. Second, the City's suppliers and public agencies we depend on for vital products and services are being asked to confirm their Y2K compliance activities. And third, each department within the City has identified and is working to fix systems that may not be Y2K compliant. Identified systems will be tested and modified to provide Y2K compliance prior to January 1, 2000.

**The City's plan**

An initial assessment of high priority items, such as water and sewer pumps, emergency telephones and radios has been completed. Vendors have confirmed Y2K compliance or committed to be compliant by September 1999. Formal written verification of Y2K compliance is requested from each manufacturer, unless verified by Internet web site. All new purchases are reviewed for potential Y2K issues - only compliant systems are authorized for purchase.

A thorough inventory of all Electro-mechanical systems, devices, interfaces and vendors of services, including but not limited to Electronic mail software, Department of Justice connection, police and fire dispatch software, telephone systems and Internet connections, has been compiled. Every item has been evaluated and categorized as either; "Mission-Critical" (cannot do without), "Required" (can do without for up to 30 days), or "Needed" (can do without for extended period but inconvenient). A migration strategy for all non-compliant systems and vendors is being developed. Strategies could include repair, upgrade or replacement. Rigorous testing of items reported to be compliant and compliance-unknown items is planned for the 3<sup>rd</sup> quarter for 1999.

**City Plan- Progress/ Status Summary:**

Timeline	Status	Targeted Completion Date		
		1st qtr 99	2nd qtr 99	3rd qtr 99
Initial Assessment	Completed	X		
Purchase review implementation	Completed	X		
Designation of Y2000 task force members	Completed	X		
Inventory	Completed	X		
Identifying Critical business processes	Completed	X		
Obtain compliance documentation	In Process		X	
Create migration strategies	In Process		X	
Create contingency plans	In Process		X	
Update Council on Y2K status, request funding for remediation projects	In Process		X	
Hardware/Software correction	In Process			X
Software Testing	Planned			X
Hardware/Network Testing	In Process			X
Y2K Ready September 30, 1999	Planned			X

Public Safety

The Police and Emergency Services Department radio systems, vehicles, and Emergency 911 system are Y2K compliant. A dedicated fuel source is available to the City in the event of widespread power outage. The dispatch system requires an upgrade.

Water Service

Paso Robles water is pumped into tanks maintaining a constant three-day supply (average January day). These pumps are remotely controlled by a computer system, which can be manually overridden if necessary. The remote control is done through a private radio system and is therefore, independent of the local Telephone Company. In the event of power failure, the city has several on-site generators to operate the pumps and chlorinators. Even on generator, the system still has excess capacity for average usage. A large supply of fuel for these generators is located in Paso Robles and delivery arrangements have been made. We have written assurances from the computer control, radio, pump and chlorinator manufacturers of Y2K compliance and plan to verify during the Y2K testing period. From water reservoir tanks to homes and businesses, water is gravity-fed requiring no additional pressure devices.

Waste Water Service

The Waste Water system is a gravity feed system with several lift stations (backup generators on standby) to carry the material to the treatment plant. The treatment plant also has a generator on standby.

Traffic Control

The traffic signals are Y2K compliant, however, in the event of a power loss, they will be black. Should there be a power outage, the city will utilize manual placement of stop signs by Public Works crews until power is restored. The railroad crossings have battery backup.

Non-Compliant City Equipment and Software:

Telephone Equipment

The Lucent voice mail system and integration software must be replaced. \$25,000

Computer Equipment

85 Desktop workstations require software upgrades to Office 97, Outlook 98, & Explorer 4.0 and patches for Windows NT via Service Pack 4. Software licenses already owned.

Software upgrade to Microsoft Office 97 requires the replacement of 22 desktop computers. \$55,000

Network router operating systems need to be upgraded. \$6,000

Finance server & Firewall station requires operating system upgrade and hardware to support upgrade. \$10,000

Police dispatch database requires an upgrade to most recent version. \$1,000

Old minutes and agenda database discontinued, transition from TRIMS to Questys. \$10,000

Scanning of 75,000 city council and planning commission documents into new system. \$15,000

Library Telxon barcode scanners and the Laserscan barcode scanner. \$3000

City Hall Heating/AC control modules require replacement. \$3500

Technical support

Computer technician/temporary help for Y2K repairs/upgrades. \$30,000

Funding

Water fund:	\$7,500
CBDG Fund:	\$2,500
Computer Equipment Replacement Fund:	\$45,000
General Fund:	\$103,500
Total:	\$158,500

Emergency Preparedness

The City has a series of plans dealing with the mitigation of any major emergency that might strike. These plans include scenarios such as loss of power, loss of bridges, loss of telephone communications, etc..... As part of our Y2K efforts, Emergency Services is designing a technology disaster recovery plan. The Department of Emergency Services is planning an exposition with the help of the San Luis Obispo County Y2K Action Alliance to inform the community about Y2K issues.

The City has also planned for possible Y2K related failures of outside agencies that may affect City operations. Like other emergencies, the City may be called upon to help citizens that are not prepared for a day or two of interrupted services. As with other community-wide emergencies, City facilities may be called upon for short-term relief. Two facilities in particular might benefit from an upgrade of emergency power systems.

**Fuel contracts**

J.B. Dewar is the city's current fuel provider. The City has installed a small electrical generator at J.B. Dewar for exclusive use by the city during times of emergency.

**Optional Enhancements to the City's Emergency Preparedness Capabilities Include:**

**City Shelter at Centennial Park**

Centennial Park is designated as the official "Red Cross" emergency shelter for the City, but there is no backup electrical system. An adequately powered portable electrical generator could not only provide back-up power at Centennial Park; it could also be used by water and wastewater operations. Should it be determined a priority, emergency electrical system upgrades would cost approximately \$120,000.

**Emergency Operations Center**

The City Hall conference room has backup power and lighting but could be upgraded to include additional lighting and workstation power. The cost for this is estimated at \$20,000.

**Communication Equipment**

With the loss of electrical supply for any extended duration, the phone system is likely to fail. The addition of twenty-five (25) 16-channel portable radios, spare batteries, and chargers would assure good internal communications should this occur. These radios would be cached and assigned for back-up communications support. \$10,000

**Emergency Food Caches**

An emergency food cache at Paso Robles Fire Station #2, to provide city employees with meals for a 72-hour work period. Fire Station #2 is the storage area for the department's 500-person field kitchen. \$3,000

**Public Awareness Campaign**

A media campaign explaining the preparations the city has made to meet the Y2K challenges and/or what the citizens should do to for themselves. \$10,000

**Optional Enhancement Funding**

Water fund:	75,000
General Fund:	\$88,000
Total:	\$163,000

RESOLUTION NO. 99-

A RESOLUTION OF THE CITY COUNCIL OF THE  
CITY OF EL PASO DE ROBLES  
APPROVING A BUDGET APPROPRIATION FOR  
YEAR 2000 INFORMATION SYSTEMS UPGRADES

WHEREAS, three problem areas have been identified with the Year 2000 issue: information system applications and processes, process and control systems and information exchanges with other organizations; and

WHEREAS, the City has established a Year 2000 team to assess its vulnerability in the three areas noted above; and

WHEREAS, while the effects and success of remedial efforts will not be fully determinable until the year 2000 and thereafter, the City has taken a proactive effort to identify and mitigate potential problems; and

WHEREAS, the Year 2000 team has identified various information system applications and processes which are vulnerable to the Year 2000 as outlined in attached Y2000 Preparedness Report; and

WHEREAS, in order to assure, as best as one can prior to year 2000, that the City will be able to continue providing uninterrupted services to the community, the information system applications and processes identified as vulnerable should be replaced.

THEREFORE, BE IT RESOLVED by the City Council of the City of El Paso de Robles that a budget appropriation is hereby authorized to remedy the Year 2000 deficiencies identified as soon as practical.

BE IT FURTHER RESOLVED by the City Council of the City of El Paso de Robles that budgetary appropriations in the amounts and accounts noted below are approved.

<u>Fund</u>	<u>Amount</u>	<u>Item</u>
100-130-5212-120	6,000	Router upgrade
100-130-5224-103	25,000	Voice mail system and integration software
100-130-5224-120	30,000	Computer technician (temporary)
100-130-5454-120	10,000	CC minutes & agenda system
100-130-5454-120	15,000	Scanning of 75,000 CC +PC docs
100-210-5224-140	1,000	Police dispatch system upgrade
100-220-5454-150	7,500	3 desktop DES
100-310-5221-192	3,500	City Hall Heating/AC control system
100-310-5454-192	2,500	1 desktop computer PW-mnt
100-610-5222-199	3,000	Library barcode scanners
112-130-5454-120	5,000	2 desktop computers CMO
112-140-5454-125	10,000	Finance Server upgrade
112-140-5454-125	12,500	5 desktop computers AS
112-310-5454-161	2,500	1 desktop computer PW-eng
112-310-5454-191	2,500	1 desktop computer PW-shp
112-411-5454-183	2,500	1 desktop computer LRS-Rec
112-610-5454-199	5,000	2 desktop computers LRS-Lib
112-710-5454-209	2,500	1 desktop computer CDD-pln
112-710-5454-217	2,500	1 desktop computer CDD-bdg
227-710-5454-211	2,500	1 desktop computer CDD-CDBG
600-140-5454-127	7,500	3 desktop computers AS-Water
Total	\$158,500	

PASSED AND ADOPTED by the City Council of the City of El Paso de Robles this 18th day of May, 1999 by the following vote:

AYES:

NOES:

ABSENT:

ATTEST:

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Duane J. Picanco, Mayor

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Madelyn Paasch, City Clerk