

Executive Summary

This is the interim report of the Joint Select Committee on the Year 2000 Computer Problem.

The Committee is confident that the computer systems in State government, particularly those that provide and maintain essential public services, are prepared for the transition to the year 2000. Although some degree of uncertainty will remain on some matters no matter what level of preparedness is achieved, we believe that agencies of the Executive and Legislative branches of government have taken all reasonable steps necessary to prepare for Y2K by identifying and replacing non-compliant systems, particularly in the most critical systems, and preparing contingency plans in the event that unanticipated problems arise. Governmental agencies charged with maintaining public health and safety such as the United States Coast Guard, the Department of Defense, Veterans and Emergency Management and the State Police have taken adequate steps to prepare for the Y2K transition and have assured the Committee that they are well prepared to continue to fulfill all their emergency response duties during and after the New Year's weekend. The Committee has been assured that State and county emergency management agencies will be staffed and in communication with one another during New Year's weekend and that on Saturday morning, January 1, 2000, state agencies will be bringing computer systems up and testing them in order to correct any problems that may arise prior to the start of business on Monday, January 3, 2000.

The Committee also believes that State government has taken the steps necessary to ensure that regular cash disbursements to individuals and municipalities are not interrupted and that investments in U.S. and international markets are managed in a way to minimize Y2K related risks. We also believe that regulated utilities providing water, electricity, gas and telecommunication services are not likely to experience Y2K related problems and have contingency plans in place to address any unanticipated interruptions of water, power and communications. Agencies such as the Bureau of Information Systems, the Office of the Treasurer, the State Auditor, the Secretary of State, the Director of the Maine State Retirement System and Public Utilities Commission, are to be congratulated for their foresight, planning and preparation in these areas.

The situation at the municipal level is less clear. A survey of municipalities undertaken at the Committee's request by the Maine Municipal Association showed that only 14% of the 202 towns responding indicated that they had Y2K contingency plans at the local level. The primary concern of municipal officials with respect to Y2K preparedness was the concern about interruptions in electrical service. Although the Public Utilities Commission and the utilities are confident that the transition to the year 2000 will likely not result in such interruptions, local unrelated outages are equally as likely to occur over the Y2K weekend as on any other weekend. The Committee is confident that the county

and state emergency preparedness agencies and the state police are prepared to respond in the event of such problems. It is important that to recognize that such uncertainty exists. The fact that 75% of the municipalities with emergency dispatch services have tested those systems for Y2K compliance provides some further assurance of prompt responses to unanticipated or unrelated localized problems.

Although the Committee was not directly charged with studying how technology is purchased and managed in State government, it became obvious to us during our study there were significant problems in those areas. The Committee has found that the process of planning and buying computers and computer systems within state government suffers from a serious lack of coordination, decentralization of decision making and, on occasion, from simple wastefulness. Some of those communication and coordination problems stem from the historically independent nature of the Executive, Legislative and Judicial branches of government. But even within these branches of government there are serious questions about inter-agency coordination as well as major questions about how state agencies plan for and acquire computer systems and how the Legislature oversees agency spending on technology need to be addressed. These are critical issues which the Committee feels must be addressed not only in the short term, but in the long term as well.

State government currently spends \$40 million annually on computers, with little or no coordination among agencies. The costs of this lack of coordination can be seen in the results of an Executive Branch contract with the consulting firm of PricewaterhouseCoopers for Y2K verification and validation services. This contract, which was signed while the Legislature was in session but without any prior consultation with the Legislature, ultimately resulted in agencies having to pay \$791,000 in direct consultant fees and an estimated \$15-\$18 million to replace non-complaint systems and equipment.¹ Because the Legislature was not involved with or informed about these potential costs, those agencies are forced to pay those bills using funds appropriated for other essential programs and public services. An example of waste can be seen in the Department of Human Service's recent decision to abandon its plans to replace an old computer system after spending \$1 million on that effort.

The Committee intends to provide its findings and recommendations on these matters in a final report to be issued during the first half of the year 2000.

¹ The initial contract was signed by the State Purchasing Agent on February 22, 1999 and was amended 20 times over the next 8 months. Department mitigation cost estimates were provided by BIS are included as Table 1. Y2K verification and validation costs by agency is included as Table 2.

Introduction

The Joint Select Committee on the Year 2000 Computer Problem was established on February 16, 1999 by a Joint Order sponsored by Senator Marge Kil Kelly.² The Committee consists of three members from the Senate appointed by the President of the Senate and 10 members from the House appointed by the Speaker of the House of Representatives. The Committee is established for the duration of the 119th Legislature.

The purpose of the Committee is to assess the prevalence of and problems related to the year 2000 computer problem in the public and private sector, to periodically report to the Legislature on the progress made by public and private sector businesses and organizations in addressing that problem and recommendations for Legislative or other action.

This is the interim report of the Committee. The purpose of this interim report is to summarize the information and testimony received by the Committee at its meetings. This report describes the process used by the committee, what issues were discussed, who participated and what was reported.

A final report will be released by the committee in the year 2000, after the Committee has met to assess what issues arose during the transition to the year 2000, the effectiveness of any contingency plans that were implemented and if any Legislative action is necessary to address immediate or long term problems associated with the Y2K transition. The final report will also include findings and recommendations on the State's ability to coordinate the planning, acquisition and use of computer technologies in the Executive Branch and between the Legislative, Executive and Judicial branches of government.

In conducting its work during this interim, the Committee met 4 times; on Wednesday, August 18th, Tuesday, September 7th, Thursday, October 14th and Monday, November 8th. Over those 4 meetings, the Committee received testimony from the following individuals and agencies:

- **Paul Mayotte**, Director, Office of Information Systems
- **Major General Earl Adams**, Commissioner, Department of Defense, Veterans and Emergency Management
- **Robert Mayer**, Chief Information Officer, Department of Administrative and Financial Services;
- **Joe Sukaskas**, Public Utilities Commission;
- **Kate Dufour**, Maine Municipal Association
- **Muriel Mosher**, Maine Manufacturing Extension Partnership

² Senate Paper 160 was read and passed in the Senate on February 2, 1999 and read and passed in the House on February 16, 1999.

- **Commander Patrick Twiss; Captain Tom Meyers and Commander Roy Nash**; U.S. Coast Guard
- **Sarah Buckley and Steve Levy**, Maine Rural Water Association
- **Major Jeffrey Harmon**, Maine State Police, Support Services Division
- **PricewaterhouseCoopers LLP**
- **Thomas Welch**, Chair of the Public Utilities Commission
- **Richard Thompson**, State Purchasing Agent.
- **Dan Gwadosky**, Secretary of State
- **Duncan MacKellar**, Finance Authority of Maine
- **Kay Evans**, Maine State Retirement System
- **Peter Merrill, Darren Brown**; Maine State Housing Authority
- **Douglas Davidson**: Maine Turnpike Authority
- **Gail Chase**, State Auditor
- **Dale McCormack**, State Treasurer

The Committee wishes to thank all of these individuals for their participation in these meetings and for providing the Committee with much useful information.

Regulated Utilities, State Police and Emergency Preparedness

Regulated utilities. The Public Utilities Commission reports that utilities have made good progress toward preparing for Y2K and are addressing areas of possible vulnerability through contingency planning.³ The Commission opened an inquiry into Y2K issues in September of 1998 and received briefings from Maine's larger utility companies in October of 1998 and May of 1999. The PUC staff has met with all utility sectors to discuss their Y2K readiness as well as meeting with regional utilities, emergency managers, utility commissions and the Independent System Operator for New England. The Commission also directed all regulated utilities in Maine to develop contingency plans by June 30, 1999 and has been reviewing selected contingency plans over the last several months.

The PUC reports on its utility service Y2K overview website⁴ that it is reasonably optimistic about the ability of Maine's electric utilities to maintain service during Y2K events. Maine's three largest electric utilities have completed all Y2K inventory and assessment activities and have completed necessary remediation efforts. The PUC has been following up with the smaller electric utilities, whose progress has been somewhat slower, to gather the information needed to assess readiness. The Commission believes that the information which is lacking relates to distribution-only utilities that likely have little vulnerability to Y2K issues. The PUC also reports that the North American Electric Reliability Council (NERC) has stated that electric power and delivery systems have met the NERC established date of June 30, 1999 for systems to be Y2K ready. The PUC notes that the current restructuring of the electric industry in Maine adds an additional level of

³ The PUC provided the Committee with an update of Y2K readiness within the utility sector which is included as an appendix to this report.

⁴ <http://janus.state.me.us/mpuc/Year 2000.htm>

complexity to Y2K planning, since certain power generation assets in the state are owned and operated by entities not regulated by the PUC. The readiness of these assets are being reviewed in the context of regional readiness assessment efforts.

The PUC also reports that the state's large and small local telecommunication exchange carriers are on track for Y2K readiness as are the larger interexchange carrier facilities in Maine.

The PUC also reports that it has met with Maine's local and interstate natural gas distribution companies and that they are working appropriately towards Y2K compliance.

With respect to drinking water supplies, the PUC reports that it shares the federal assessment of "cautious optimism" that water utility services will continue uninterrupted by Y2K. The PUC notes that a wide range of size and technology exists among Maine's water utilities and notes that the Portland Water District has the largest ozonation plant in New England. Of the approximately 153 regulated waters systems in Maine, however, 140 serve a population of fewer than 10,000 customers. These smaller utilities are usually very low-tech, some without any automation or computerization at all. The Maine Rural Water Association (MRWA) has undertaken a large scale effort to work with these smaller utilities to coordinate with state and federal agencies, including assistance in complying with PUC requirements for Y2K preparedness, providing technical assistance and education and helping these smaller utilities prepare contingency plans. The MRWA reported that it will serve as a Y2K response center for small water utilities, in cooperation with the National Rural Water Association and 44 other affiliated rural water associations nationwide. In addition, MRWA staff will be available on January 1, 2000 to assist water utilities around the state with Y2K related problems. Many PUC regulated utilities also have responsibilities for waste water treatment as well, and thus efforts by the PUC and MRWA are enhancing the readiness of the waste water sector as well.

State Police. The Maine State Police reported to the Committee that they had completed testing for all systems under their control and are confident that those systems are prepared for the year 2000. Some systems are being phased out, but all critical systems that are being retained or upgraded have been tested and have contingency plans in place in the event of unforeseen circumstances. All emergency response vehicles have been certified from the manufacturer as Y2K compliant and the agency is working closely with the Bureau of Information Services (BIS) and the Department of Administration and Financial Affairs (DAFS) to ensure that its communications infrastructure is 100% compliant prior to December 31, 1999. The Committee is confident that the State Police are appropriately placing critical importance on its ability to respond rapidly to any emergency event and to maintain uninterrupted communications with other agencies and the public. The State Police anticipate an increase in calls over the

coming New Year's weekend and has made plans to provide increased dispatch staffing.

Emergency preparedness. The Department of Defense, Veterans and Emergency Management has been preparing for the year 2000 conversion for nearly two years and is confident that critical communications and response systems are tested and compliant and will be able to respond rapidly and effectively in the event of any emergency. The department's emergency response center in Augusta will be 100% staffed over the New Year's weekend and will maintain communications with county and local emergency response agencies, the Coast Guard and other Federal agencies emergency response agencies.

Although questions about the readiness of E-911 systems arose during the Committee's study, the PUC, the Department of Emergency Management and the Department of Public Safety informed the Committee that the statewide E-911 system in Maine will not be initially deployed until the first quarter of the year 2000 and is therefore not a Y2K issue. The PUC also reports that the local basic 911 services should not encounter any Y2K interruptions.

Coast Guard. The Coast Guard reported that its port safety and environmental protection response vessels and equipment have been tested and are Y2K compliant. Vessels and equipment relied upon by the Coast Guard for search and rescue law enforcement and port security, including helicopters, cutters and other boats, have also been tested and found compliant. Operation centers are equipped with emergency back up power and communications and would continue to function in the event of a power outage. The global positioning system used by the Coast Guard has already passed its critical roll-over date and is not expected to experience any problems in the transition to the year 2000. All navigational buoys are Y2K compliant, although some lighthouses may operate at reduced intensity if power fluctuations occur.

Executive Branch; Bureau of Information Services

The BIS's most recent report to the Committee indicates that, overall, approximately 95% of the systems and applications in state government are Y2K compliant and that Maine ranks among the top New England states in terms of its preparedness for the year 2000.

Table 1 presents a summary of the BIS's most recent report of agency Y2K compliance rates and anticipated compliance related costs. The Bureau of Information Services (BIS) and the Chief Information Officer for the State worked extensively with the committee to help the Committee understand how the state agencies have prepared for Y2K and how effective those efforts have been in preparing state government for the transition to the year 2000. The BIS deserves a substantial amount of credit for its efforts in this area and for attempting to

coordinate agency activities in the absence of the statutory authority to direct the actions of those agencies in such matters. Efforts by BIS to coordinate the activity of state agencies, quasi-independent agencies and the other branches of government included direct support , monthly meetings of IS personnel and regular surveys of the agencies to determine the status of compliance efforts. The Committee was disappointed to learn that some agencies, including the Legislature, the Maine Turnpike Authority and the Judiciary, were not regularly

attending these meetings or responding to these surveys. The BIS did report, however, that participation in those activities improved somewhat after the Committee wrote letters encouraging that participation. In addition to its efforts at coordinating and tracking activities of the agencies, the BIS also entered into a contract with PricewaterhouseCoopers LLP to provide Year 2000 independent verification and validation (IVV) services for a number of Executive Branch agencies. The original contract was signed on February 22, 1999 and was subsequently amended 20 times between May 3, 1999 and October 22, 1999.⁵ Each of those amendments was for a specific agency and for a specified amount of money for the completion of the IVV. A listing of the dates and amounts of those contract amendments is provided in Table 2.

Table 1
Agency Y2K Compliance Rates
And Anticipated Compliance Costs
As of October, 1999

<u>Department</u>	<u>Percent Complete</u>	<u>Anticipated Mitigation Costs</u>	<u>Notes</u>
DAFS	98.26%	\$6,579,159	
Agriculture	100%	\$16,453	
Conservation	100%	\$22,214	
Corrections	96.50%	\$97,826	
Defense and Veterans	100%	\$22,573	
Economic Development	20%		Non-critical system that needs upgrade. Supported by Labor
Education	89.53%	\$150,560	
Environmental Protection	100%	\$40,213	
Executive	93.33	\$900	
Humans Services	100%	\$2,041,966	
Fish and Wildlife	100%	\$40,617	
Labor	91.81%	\$5,208,151	
Marine Resources	87.65%	\$16,850	
DMH&MR	100%	\$23,792	
Professional Regulation	100%	\$250,721	
Public Safety	86.29%	\$550,384	
Transportation	100%	\$477,000	
Miscellaneous		\$27,144	
EXECUTIVE BRANCH SUBTOTAL		\$15,566,523	
OTHER AGENCIES			
Attorney General	100%		
Audit	100%	\$2,600	
Finance Authority	100%	\$50,000	
Maine State Housing	81.93%		
Judicial Branch			Reports directly to Judiciary
Legislative Council	97.60%		Reports directly to Legislature
Secretary of State	100%		
Turnpike Authority	96.83		
Miscellaneous		\$85,531	Misc boards and commissions
OTHER AGENCIES SUBTOTAL		\$138,131	
TOTAL, ALL AGENCIES		\$15,704,654	

Note: All information provided to the Committee by the BIS

Although the BIS should be recognized for its efforts in helping to make agencies aware of the importance of Y2K planning and in helping to bring state government to an apparently high level of Y2K readiness, the Committee was, and remains, highly critical of the how this PwC contract was executed and how the results of its verification and validation study were handled. The failure by the Executive Branch to discuss the need for the contract or its potential financial implications with the Legislature in January or February, while the Legislature was debating the very Joint Order that created this study, is difficult to understand, as is the initial decision to not produce any formal final written report. Although much of the materials, findings

⁵ The February 22nd contract was signed less than one week after the Legislature debated and finally passed the Joint Order establishing this study committee.

and recommendations of the PwC work are now available, the process is well worthy of further discussion with the goal of avoiding such situations in the future.

TABLE 2.

Agency Costs for Independent Verification and Validation Services Provided by PricewaterhouseCoopers, LLP

2/22/99	Original Contract with BIS	\$127.80/hr
5/3/99	Bureau of Info Services	\$44,592
5/3/99	Transportation	\$27,144
5/12/99	Accounts and Controls	\$55,880
5/20/99	Administration and Financial Services	\$47,439
5/28/99	Professional and Financial Reg	\$24,165
5/31/99	Labor	\$57,336
6/15/99	Fisheries and Wildlife	\$16,617
6/15/99	Administration and Financial Services	\$15,949
6/15/99	Education	\$31,755
6/15/99	Taxation	\$40,700
6/17/99	Corrections	\$34,302
6/22/99	Public Safety	\$46,384
6/22/99	Conservation	\$22,214
6/23/99	Human Services	\$86,356
6/24/99	Agriculture	\$16,453
6/25/99	Environmental Protection	\$30,213
7/12/99	Mental Health/Mental Retardation	\$23,687
7/26/99	Marine Resources	\$34,687
8/11/99	State Purchasing Agent	\$76,680
10/22/99	Secretary of State	\$58,800
TOTAL	ALL AGENCIES	\$791,353

Note: Prepared by the OPLA from signed contracts.

The independent verification and validation process used by PwC was essentially a review of each agencies plans and processes to assess the degree to which the key components of a Y2K readiness program are being addressed by that agency. Testing of applications and related infrastructure was not within the scope of the PwC contract. The principal tool used by PwC to assess those agency systems was a survey and interviews with agency staff. The survey and interviews focused on primary business functions. Completion and analysis of the surveys was followed by the issuance of report cards and status reports for each agency .

At the request of the Committee, PwC provided the Committee with a briefing on its process, findings and recommendations. Although the briefing itself was lacking in detail and uninformative in many areas, the findings and recommendations of PricewaterhouseCoopers were:

With respect to awareness and risk assessment:

- *that general awareness of Y2K issues among the agencies was good but that the business risk to state agencies is difficult to quantify; and*
- *that agencies need to validate and recheck inventories that support critical agency functions.*

With respect to strategy and planning:

- *That, due to the decentralized nature of state government, there is no common state-wide approach or process among agencies, or even within agencies, for preparing for Y2K;*

- *That a single Y2K coordinator be appointed within each agency to avoid gaps in preparations among different agency systems; and*
- *That the state needs to develop a single Y2K risk management and contingency plan for critical functions.*

With respect to remediation:

- *That the state should focus on systems that support critical business functions and should perform more investigation and testing when receiving vendor compliance letters for critical services; and*
- *Improve documentation to support remediation efforts.*

PwC also recommended more generally that the state select a date and freeze changes to applications and that agencies should review staffing needs for the period around January 1, 2000.

BIS has indicated that progress has been made in the areas noted by PwC since those recommendations were provided.

A copy of the most recent BIS summary report on agency verification and validation issues is attached as an Appendix to this report.

Report from the Maine Legislature

The Office of Legislative Information Services reported in August that the legislative systems were 97% compliant, that key systems were tested and are ready but that additional work remains to be completed. Although the mission critical systems are tested and ready, desk top upgrades to Microsoft Office 2000 are anticipated prior to December 31, 1999 and some contingency planning remains to be completed. The overall assessment, however, was that the operations of the Legislature are not expected to be affected by year 2000 issues.

Report from the Office of the Treasurer

The Office of the State Treasurer reported to the Committee that it has identified and checked all systems that could potentially be affected by Y2K and has prepared contingency plans in the event any of these systems fail. In addition, the Treasurer has obtained letters of assurance of Y2K compliance from both Key Bank and Fleet Bank, the two main banks with which they do business. Treasury's contingency plans, which were discussed in some detail with the Committee, are designed to prepare for unforeseen problems at either or both of those banks, with the State computer systems or with interruptions in electrical supply.

The State Treasurer and key staff will be in the Treasurer's Office on Saturday, January 1, 2000, to log onto all systems, check their bank balances with Key Bank and Fleet Bank and to test all systems. In the event that a problem arises, the Treasurer is prepared to put contingency plans into place before the start of business on Monday, January 3, 2000.

The State Treasurer provided the Committee with the following summaries of the preparedness efforts and contingency planning for its various systems.

Abandoned property. The Treasurer reported that the abandoned property database is 100% compliant and that the Office has obtained a letter of assurance from Ken Wagers, the President of Wagers & Associates, Inc., warranting that the Unclaimed Property Management System (UPS2000 and Holder Reporting Software) used by the Treasurer are Y2K compliant. As part of its contingency plan, the Treasurer has on file paper copies of all the data in the Wager System to ensure that no claims or paperwork will be irretrievably lost. The Abandoned Property Division is also planning to run 50 blank claim forms on or before December 31, 1999 so that new claims can be hand-written in the event the system malfunctions. The Unclaimed Property Management System database contains 85,000 records, all of which are held in perpetuity by the Treasurer.

Municipal revenue sharing. The Treasurer also reported that the Municipal Revenue Sharing program is 100% compliant. The Municipal Revenue Sharing program utilizes the Lotus Approach Millennium software, which is reported to be Y2K compliant. The Treasurer is ensuring that the software is being independently tested and that a letter of assurance of compliance will be on file prior to January 1, 2000. As a contingency plan, the Treasurer will run the January 2000 checks for the 494 municipalities prior to December 31, 1999 and will store them in a vault. Those checks will be available to be sent to municipalities in January in the event the system malfunctions. The checks will be destroyed if they are not used. The Treasurer has also provided that a sufficient number of blank checks are on hand to hand-write the municipal checks if necessary.

Treasury cash receipt system. The Treasury Account Management Information System is a new system to the Office of the Treasurer and is designed to record and reconcile banking accounts. The program was written by Pine Tree Data Systems to be Y2K compliant and will allow the Treasurer to continue to reconcile bank accounts even if the computer systems fail in one or more of those banking institutions. With respect to contingency planning, the Treasurer will maintain hard copies of all bank account reconciliations and cash receipts and will ensure that all the most recent bank account details are printed and stored prior to December 31, 1999. The Treasurer will also ensure that all deposit tickets are clearly validated at the bank and that receipts are maintained so that hard copy records are available in case bank back-up is necessary. Extra

mailing labels for key finance officers will be printed prior to December 31, 1999 in the event that further directions to those departments is necessary after January 1, 2000.

Desktop hardware and software. The Treasurer reported that the State Bureau of Information Systems has tested and approved all desktop hardware in the Treasurer's office as Y2K compliant. The software used by the Office, Microsoft Office 97 with Outlook 98 and Lotus 98, are Y2K compliant as stated by the manufacturer. With respect to contingency plans, prior to December 31, 1999, the Treasurer will print documents necessary to conduct business in January of 2000. All of Treasury's files will be backed up to CD in the event that any saved files are damaged or lost.

The Treasurer's cash pool. The Treasurer reported that the Treasurer's cash pool programs are 100% compliant. All records of the cash pool are maintained in a compliant version of Microsoft Excel and are backed up by hard copies. Fleet Bank, which is the custodian of all investments by Treasury, has provided written assurance of compliance to the Treasurer as have all brokers with which the Treasurer trades on a daily basis. With respect to contingency planning, no commercial paper will be purchased beyond December 31, 1999 and no investments after December 31, 1999 will be made without a letter of compliance. Should there be an unforeseen problem with the State's custodian or a broker, hard copy records are kept by the Treasurer and can be used to recreate account information. The Treasurer has also assured that investors have access to their funds in the pool in the event of unforeseen problems by being prepared to hand-write check for the agencies invested in the cash pool that desire to make withdrawals after January 1, 2000.

Report from the Department of the Secretary of State

The Secretary of State is confident that the programs and systems administered by the department will be reviewed, tested and, where necessary, brought into Y2K compliance prior to December 31, 1999. In preparing for the transition to the year 2000, the Secretary of State has already reviewed, tested and remediated many key systems and has taken two additional important steps to ensure 100% readiness. First, they have established a Y2K Program Management Office that consists of top department managers and information systems professionals. Second, they have contracted with PricewaterhouseCoopers to perform an independent assessment of the plans, processes and activities pertaining to Y2K readiness with a concentration on contingency planning. The department's Program Management Office will serve a key function in cooperating with PricewaterhouseCoopers in those efforts. The scope of the PricewaterhouseCoopers review within the Secretary of State's office will focus on the following areas:

- Business applications

- Information technology Infrastructure
- External information exchange
- Supplier relationships
- Bureau of Information Systems in the office
- Contingency planning workshops

The Secretary discussed with the committee several areas in which Y2K remediation was undertaken as long ago as 1988, due to the fact that many of the applications in the department require advance dating. For example, systems tracking long term trailer registrations, which have 8 and 12 year expiration dates, were reviewed for compliance in 1988, driver licenses, which are valid for 6 years, were reviewed in 1994 and records of driver license suspensions and other administrative actions, which can extend as long as 6 to 10 years, were reviewed in 1994. The corporations database was designed with 4 digit date fields, since many corporations date back to the 1700's, and is therefore not expected to present any problems as they transition to the year 2000.

The Secretary noted several additional readiness activities within the department which have already taken place or were underway at the time these matters were discussed. Those include:

- Identification of the critical business functions of the department
- Inventory key processes that support those functions (such as information technology infrastructure components, system interfaces, vendors and suppliers and key business partners)
- Review, testing and remediation of 1500 mainframe programs
- Testing of mainframe applications that support critical functions
- Review and testing of PC hardware and software

The Secretary reported that detailed contingency planning for all systems is underway in coordination with PricewaterhouseCoopers and will be in place in time to ensure that the department's key functions continue to operate without interruption.

Report of the State Auditor

The State Auditor reported that its desktop hardware has been checked and is compliant and that no problems are anticipated in their systems during the transition to the year 2000. Because much of the auditing activity of the agency is recorded by hand and the agency has little or no direct contact with the public, a Y2K related failure of its desktop systems would not pose an immediate problem for the agency or the public.

Report of the Maine State Retirement System

The Retirement System reported to the Committee that many of its systems have been tested and are compliant, and that those that have not been completed will be tested and compliant before December 31, 1999.

Specifically, the Retirement System testified that its benefit and payroll systems, those systems that provide checks to individuals, were tested for transition to the year 2000 and for compliance with the leap year date of February 29, 2000. Although there were no problems during these tests, the Retirement System will be duplicating checks paid out in October of 1999 and storing them in a vault in the event that unforeseen circumstances prevent the issuance of checks in January of 2000. The general ledger systems of the Retirement System were upgraded in 1998 and were reported to be compliant. Internal payroll for its 118 employees is not expected to have problems, but the Retirement Systems is prepared to write payroll checks by hand if problems do arise.

Contributions into the retirement system from school administrative districts and participating local districts are currently done through the mail rather than electronically, so no Y2K related issues are expected to arise in that area. The city of Portland and the Maine Maritime Academy do, however, make their contributions electronically, although no problems are anticipated with those transfers since all the desktop hardware has been tested and is compliant.

Certain key data kept by the Retirement System, such as the time in service for state employees, is kept in a data repository on the non-compliant state mainframe computer system. Retirement will, however, have that data completely off the state main frame and on a compliant computer system prior to December 31, 1999.

The Investment Advisory Committee for the Maine State Retirement System has been reviewing its investment strategies in light of some degree of uncertainty with respect to the Y2K readiness of international markets. The Retirement System considers security industries in the U.S. to have a high degree of readiness, but the Advisory Committee is reviewing strategies such as possibly suspending trading over the Y2K weekend or temporarily going to cash as methods to minimize risks posed by international markets.

Report of the Maine State Housing Authority

The Maine State Housing Authority reported that it has substantially completed its work on Y2K compliance issue and has a high degree of confidence that key systems are compliant. The Authority developed a comprehensive awareness and education, assessment and inventory and validation and remediation program that began as early as 1997. Part of that plan included a "hotsite" in Portland that contained backup computer platforms for the agency. These

platforms were used to test all of the Authority's critical systems and applications. All systems that encountered problems during testing were remedied and retested. The Authority also reported that its business partners and vendors were required to provide Y2K plans for review and to provide written assurance about their Y2K readiness. Contingency plans were formulated for those partners which the Authority felt may pose a problem to its operations. The Authority was also reviewed for compliance by the Federal Department of Health and Human Services. Finally, the Authority contracted with the independent accounting firm of Baker Newman & Noyes to perform an independent review and assessment of the agency's Y2K work and subsequently took action to address each recommendation made by BNN.

Report of the Maine Turnpike Authority.

The Maine Turnpike Authority reported that it has achieved final Y2K compliance sign-off on all of its systems. The Authority made the important point that, since its bonds are backed by toll revenues, its bond rating is tied directly to the reliability of toll collection systems. The Authority assured the Committee that its toll collection systems are 100% compliant and that, in the event of an unforeseen problem, its contingency plan is to collect tolls manually if necessary.

Report from the Finance Authority of Maine

The Finance Authority of Maine reported to the Committee that it has undertaken thorough testing of its systems and is confident that its critical systems are ready for the year 2000. They cautioned the committee, however, that although their approach was designed to identify and correct hardware and systems that may not be Y2K ready, they could not provide full assurance that FAME will be immune from problems relating to Y2K.

FAME reported that it contracted with an independent information technology consulting firm to assist it with its efforts to prepare for the Y2K. Specifically, they initially inventoried all their systems and business relationships and identified critical elements that could be affected by the year 2000 transition. Each system identified as critical was tested independently. For non-critical systems, FAME obtained responses from business partners and vendors regarding the readiness of those systems.

Fame identified four software applications as critical: loan servicing (LoanLedger), general accounting (American Fundware), Microsoft Windows NT Server 4.0 (Win NT) and a FAME customized database. The loan servicing and general accounting software systems were tested by entering routing transactions on key dates in 1999 and 2000 to see if the systems worked.⁶ The Win NT systems were tested using the methodology and information provided by

⁶ Those dates were 9/9/99, 12/31/99, 1/1/2000, 1/3/2000, 2/29/2000 (leap year) and 7/1/2001.

Microsoft Corporation and the FAME customized database was independently tested by consultants. All these systems were found to be Y2K ready.

FAME also reported that its desktop hardware and software applications were tested using industry standard Y2K testing applications. Computers that were determined to be non-compliant were replaced with systems that were vendor certified as compliant.

Report of the Maine Municipal Association

At the request of the Committee, the MMA conducted a survey of municipalities to assess municipal preparedness for the year 2000. The Committee appreciates the efforts of the MMA to assemble, implement and analyze this survey in the short time available. A copy of MMA's preliminary analysis of the survey results is attached as an Appendix to this report.

The survey results presented an ambiguous picture of local preparedness. Only a minority of those responding had created formal contingency plans for addressing Y2K problems and that Y2K related information was coming from a wide variety of sources, including all levels of government, medical service providers, vendors and community groups. Those that have done some planning identified loss of electricity as their biggest concern and the lack of adequate generators and resources such as food, cots and blankets as their biggest needs. The survey appears to show that very little concern has been expressed from residents about Y2K and that only half the municipalities were engaged educational campaigns on Y2K. It was evident, however, that municipalities with local dispatching services did invest time and money to test those dispatching equipment for Y2K compliance.

Next Steps

The Committee will meet at least once during the 2nd Regular Session of the 119th Legislature to assess any Y2K related that arose during the transition to the year 2000 to determine if any action is needed by the Legislature to address immediate or longer term issues. The Committee feels strongly that the issue of improving coordination and information sharing when acquiring computer technology among agencies, and particularly between the branches of government, is a critical need and must be addressed. The Committee will be exploring those issues next session and will be providing the Legislature with its findings and recommendations in that area in a final report we anticipate will be released prior to the end of the session.