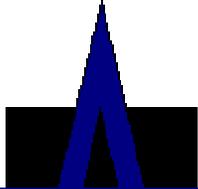


**Rhode Island
Information Resources Management Board**



**SECOND ANNUAL
PROGRESS REPORT**

TO

GOVERNOR LINCOLN ALMOND

AND

THE RHODE ISLAND GENERAL ASSEMBLY

JULY 1999



INFORMATION RESOURCES MANAGEMENT BOARD

Second Annual Report

July 1999

Fiscal Year 1999 was officially the third year of operation of the Office of Library and Information Services and its oversight group, the Information Resources Management Board. The Board itself has been in operation for just two years, having held its first meeting in June 1997. During the past year, the Board adopted the first five-year plan for information resource management for state government. This five-year plan provides the framework for OLIS' efforts during the past year and for the future.

In a significant break with traditional methods of producing plans, the IRMB approved issuing this plan only as a hypertext-linked document available through the IRMB website (www.irmb.state.ri.us). The intent is to have this document be an ongoing "work in progress," with goals, objectives, and other elements of the plan being revised as needed on line, without the frustration experienced by readers of more traditional paper-based documents that cannot be updated easily or often.

This second annual report will also be produced primarily as an online document available through the IRMB website. The sections of the report are:

- Executive Summary
- Major accomplishments during FY 1999
- Progress relative to approved goal areas
- Future activities
- Issues

EXECUTIVE SUMMARY

This second Annual Report for the Information Resources Management Board outlines major accomplishments, future plans and issues in six major goal areas identified by the Board: Year 2000 remediation, the Financial Management Information System, infrastructure and telecommunications, public access, electronic commerce, and the safeguard of existing service levels provided by Information Technology to the rest of state government. In each of these six areas, cooperative efforts, system-wide policies and procedures, and centralized purchasing of technology-related equipment, software, and service have been, and will continue to be, the keys to the state's successful, cost-effective and efficient use of technology to meet Rhode Island's needs for state government services and information.

MAJOR ACCOMPLISHMENTS DURING FY 1999

- Completed 90% of Year 2000 remediation and testing of current systems.
- Began implementation of the Financial Management Information System (FMIS).
- Established policies, standards and procedures to support effective use of technology by state government and public access to state government information.
- Published, distributed and provided training for a CD-ROM product presenting geographically-based census and other data for Rhode Island.
- Made an agreement with Bell Atlantic for the consolidated administration of voice and data services for state government to achieve significant savings.
- Established a help line for technical support.
- Developed, in cooperation with the Office of Purchases, Master Price Agreements for technology purchases and services.
- Created a web-based index of links to state government websites.

Background

One of the first actions that the newly appointed Chief Information Officer took in the summer of 1996 was to contract with the firm of Deloitte & Touche to conduct a study of the current status of information technology particularly in the Department of Administration, and to make recommendations as to how the state should proceed to modernize its approach to information technology management. Looking back from the perspective

of three years later, it is gratifying to see what progress has been made in the areas identified in their study. The four most urgent recommendations were:

1. Begin addressing the Year 2000 problem.
2. Implement a state government-wide financial management information system to replace the cumbersome mainframe-based system operated by the Department of Administration and the many shadow systems operated by other agencies.
3. Reorganize the Office of Information Processing to allow it to act as a true central information service support to all of state government.
4. Establish state government-wide standards for information technology.

All four of these priority areas have been addressed to some extent, and major strides have been achieved in all four.

CURRENT STATUS OF GOAL AREAS

As reported in last year's Annual Report, the Information Resources Management Board established a vision for the future, a mission for the state's information technology operations, and six priority goal areas for emphasis over the next five years. The following list the status of each goal area as of June 30, 1999.

Goal Area 1: Year 2000 Remediation

This year has seen the most intensive activity relating to Year 2000 since the project began. All agencies have completed the inventory and assessment phases of work on their computer systems and associated equipment and software. In addition, more than 90 percent of mission critical systems have been remediated and in-house tested for Y2K compliance.

In January 1999, Governor Almond issued his second Executive Order relating to Y2K (the first one issued in January 1997, naming the Chief Information Officer as responsible for overall state government activities concerning Y2K). In this second Executive Order, the Governor specified certain deadline dates by which various tasks needed to be accomplished (See attached copy of Executive Order 99-1). We are pleased to report that all agencies have completed their required tasks by the deadline dates, with the exception of a very few systems. The agencies operating these systems have received waivers of the dates because of particular circumstances preventing their completion in the specified time frame. All of the systems receiving waivers are on schedule for completion and testing well before the end of the calendar year.

During the year, the project continued the services of our consultant, Don Estes, who is currently performing an Independent Verification & Validation (IV&V) analysis of the

various remediated systems. This process is recommended as a check against the in-house testing that has been accomplished to date.

During the final quarter of Fiscal Year 1999, emphasis shifted from remediation and testing to contingency planning and public information. All agencies are required to produce business contingency plans no later than August 1999, to assure that appropriate actions will be initiated should electrical, telephone, or other systems not continue to work as needed during the calendar date changeover. Governor Almond also has appointed a Public Safety Task Force, headed by Adjutant General Reginald Centracchio, to establish a coordinated public safety contingency plan that includes all state agencies having public safety concerns, as well as all municipal governments. The Task Force report is due to be presented to the Governor in August.

The project has produced a continuously updated website that maintains current information about Y2K issues and state government's responses to these issues. The website location is www.year2000.state.ri.us. The project has also distributed several thousand brochures giving information geared to the general public's concerns about the issue. The project has also sponsored, or co-sponsored with other interested organizations, several public forums to address questions and concerns about public utilities, health care, and other specific topics.

During the remainder of calendar year 1999, efforts to inform the public about valid concerns regarding Y2K and to reduce the potential for panic about unlikely events, will intensify. We believe that the state of Rhode Island is well prepared to withstand any potential disruption of government services as we enter the new millennium.

Goal Area 2: Financial Management Information System

The FMIS project officially began in August 1998, with a contractual agreement between Oracle Consulting and the State of Rhode Island. The contract is a fixed-price contract for a pilot project involving three state departments: Administration, Corrections, and Mental Health, Retardation and Hospitals. The state purchased the Oracle package of financial software. The pilot project was intended to work with three of the Oracle financial modules (General Ledger, Accounts Payable, and Purchase Order) in the three pilot departments, with the understanding that Oracle Consulting would work with the state to customize the software as needed, test the software under realistic conditions, and conduct training of appropriate staff. As originally envisioned, the project was to be a partnership between Oracle and the State of Rhode Island, with each partner anticipating the contribution of considerably more resources to the pilot project than the amount contained in the contract. At the time, both parties understood that neither had experience with a project of this magnitude in an entire state government, and that, if it were successful, Oracle could use the expertise developed in working with Rhode Island to its benefit as it began to work with other states.

As it turned out, the project timeline has had to be extended. The original schedule called for the installation, customization, testing, and training for the three initial modules in the three pilot departments to be completed by July 1, 1999. One major factor contributing to the need to extend the timeline was the fact that it was not possible to assign an appropriate number of staff to the project to accomplish all the needed tasks. Training of staff has only just begun, and there has been no opportunity so far to address the important issue of "business process reengineering." Also, towards the end of the fiscal year, we learned that the FY 2000 appropriation would be considerably less than the amount that had been requested in Governor Almond's proposed budget. For these reasons, the project will move forward more slowly than originally anticipated.

Nevertheless, the project has already accomplished a great deal. Of primary importance is the fact that we now have a much better understanding of the magnitude of the project, and we have made many more people aware of the need for appropriate levels of information technology resources—both human and technical—as we move toward a more electronic way of doing business. In addition, some specific accomplishments are listed below:

The pilot has developed into a much larger project than we anticipated, especially for the DOC and MHRH. A sentiment has grown within the management committee that unless the pilot implementation duplicates the way the system will be utilized in statewide deployment, then we have not truly evaluated the product. Because of this, suggestions to scale back the pilot have not been considered.

The original charge for the Pilot Project was for the vendor to implement a functional/operational product at the three Pilot Departments within the specified amount of \$825,000. This was an ambitious undertaking; however, it is a major achievement in itself that the pilot has produced a product that the Comptroller and the technical team, with the input of the participating departments, feel confident can be made to serve the financial management needs of state government.

Other achievements include:

- End-users have been trained on Oracle Financials.
- State IT staff has developed significant technical expertise.
- An experienced Oracle financials DBA has been retained.
- A Unix server has been installed in Johnston.
- Oracle database and applications are installed and ready on that platform.
- Necessary desktop computer replacements are in place at pilot departments.
- Necessary network upgrades at Howard complex are near completion.
- A 20-workstation training LAB has been established to facilitate the development of a Statewide FMIS.
- We have a better understanding of the complexity of the task and the resources required to implement a Statewide Integrated FMIS.
- A Human Resources WEB Page has been established for the basis of employee self-service applications.

Despite these achievements, it is essential that there is recognition throughout state government that significant allocations of financial and human resources will be required over the next several years to assure the success of this project.

Goal Area 3: Infrastructure/Telecommunications

Because of the intensive Year 2000 remediation effort required this year, many of the needed upgrades or replacements of existing equipment were accelerated. This effort allowed OLIS not only to make its systems Y2K compliant, but also meant that the systems would be functional and appropriate for the future.

Among the achievements during this year were:

- Standardization of desktop hardware and software throughout state government.
- A series of Master Price Agreements that pre-qualify vendors to provide various kinds of products or technical services to the state so that state agency personnel can purchase these products or services without the cumbersome requirement to issue RFPs for relatively routine purchases.
- Decision to employ the Oracle database as the standard to allow for distributed systems to replace the existing, less flexible mainframe systems where appropriate.
- Continuing effort to assess the capacity of individual state agencies to accommodate new technologies and customer services.
- Agreement with Bell Atlantic to centralize and consolidate both voice and data administration within OLIS, which is expected to result in significant savings and efficiencies over the next two years.
- Commitment to invest in a SONET ring to allow redundant capacity for voice and data communications among all agencies in the Capitol Complex, the Howard Complex, and the Johnston Data Center.
- Significant expansion of capacity at the Johnston Data Center.
- Central e-mail and Internet access services increased to 7,500 state employees in 25 agencies. As of the end of FY 1999, approximately 50 percent of state employees having e-mail access are connected to the centrally operated e-mail system that allows them to communicate easily with one another through the same system. "Appropriate-use" policies for Internet access by state employees were put in place in 1998, and each employee requesting Internet access must sign a form agreeing to the policies before being authorized for access. A copy of the policy statement and form is attached to this report.

- OLIS programming staff and technical support staff have engaged in training activities to broaden their understanding of new technologies and of different approaches to technical services that they will be required to provide.
- State government policy and procedures for centralizing through OLIS requests for use of rights-of-way along major highways or on telecommunications towers was promulgated during this fiscal year. The policy and procedures statements have been of increasing value as individual telecommunications providers have attempted to negotiate with individual agencies rather than conforming to statewide requirements.
- Within the Department of Administration, a help-line service was instituted, whereby, all requests for technical support for desktop equipment are routed through a central help line and assigned to the appropriate technical support staff. Standards for response time to attend to customer service requests have been established and are being monitored.

Goal Area 4: Public Access

The goal area of public access is one where the convergence of Library Programs and Information Technology within a single administrative structure (OLIS) provides significant strength. The tradition of public access to information that has existed in libraries for centuries is combined with the technological expertise of the information technology staff to support the giant leaps that are happening with increasing speed as the Internet proliferates. Some examples of the increases in information accessibility that have occurred in state government over the past year are listed below.

The OLIS Information Technology Services unit convenes regular meetings of a Webmakers Group of state employees responsible for developing and maintaining web pages for their agencies. This group provides assistance and support for each other as the importance of web access to state government information continues to increase. As part of this effort, OLIS has established the website www.info.state.ri.us, through which the webmaster attempts to provide links to all other state government websites.

The state of Rhode Island is beginning implementation of a Government Information Locator Service based on a grant program from the federal Institute of Library and Museum Services to the state of Washington. The intended outcome from this project, which was demonstrated to the Information Resources Management Board at its May 1999 meeting, is to provide access to government information in a standardized format over the web regardless of the level of government, location, or type of information (legislation, regulations, reports, interactive transactions, etc.), so that the information seeker needs only to know what she/he is looking for, and does not have to cope with the many ways in which different governmental entities record or distribute their information. The Rhode Island effort is a cooperative venture between OLIS and the Secretary of State. It is expected that the initial information available through this project will be on line by the end of this summer.

Another area in which OLIS is moving forward is in the area of Geographic Information Systems. During the year, the GIS Unit of OLIS developed a CD-ROM that includes the software required to download geographic information about the state and manipulate that information to obtain a visual image of various elements, including census data such as distribution of elderly residents or pre-school children or the pattern of roads, railroads, industrial zones, etc. This CD-ROM has been previewed and tested with the IRMB and other audiences. In fall of 1999, GIS staff will provide training sessions for library staff throughout the state and copies of the CD-ROM will be distributed to every public library for use by their patrons.

The 'quote' "public access" also includes state government employees, who are customers of OLIS, and efforts to provide e-mail and Internet access to state employees are part of OLIS' commitment to public access. OLIS also operates a library staffed with professional librarians available during regular state government business hours to provide reference services and materials for employees. Since this is a service that was not available before the establishment of OLIS in 1996, use of these services is not as widespread as we would hope; however, we have conducted many outreach efforts, including a mailing to all state employees (see attached brochure) and write-ups in *Personnel Pride*.

Goal Area 5: Electronic Commerce

During FY 1999, the state entered into a three-way cooperative effort among the Department of Administration, the General Assembly, and Electronic Data Systems (EDS) to explore a risk-reward relationship involving a public-private partnership to accomplish the state's goals of using technology to improve customer service, to reduce costs where possible, and to improve employee productivity. This project was named The Rhode Island Government Transformation Project (RIGTP). Its first tasks were to analyze some of the current activities in the Department of Environmental Management and the Division of Motor Vehicles in the Department of Administration. EDS produced a three-volume report (available on the web) with recommendations for various types of improvements in both administrative structure and service delivery. Most prominent, and symptomatic of issues that pervade the entire state government, was the recommendation that licensing, permitting, and registration for various kinds of authorizations be done electronically. Several states—most notably Massachusetts—have already made motor vehicle registrations available to the public over the Internet. Other states are simplifying the way that small businesses must register to conduct business with the state.

As the Year 2000 issue becomes moot, all governments, as well as businesses, will be focusing more and more on electronic commerce. The state of Rhode Island is already involved to some extent, primarily with Electronic Funds Transfer and Electronic Data Interchange. Also, the several-year-old Vendor Information Program operated by the Division of Purchases requires that vendors register on line and respond to RFPs on line. Much remains to be done; however, Rhode Island is in the forefront of some elements needed to move forward with electronic commerce.

In 1998, the legislature passed a bill authorizing the use of electronic commerce and particularly the use of digital signatures in transactions involving state government. This bill is now *Rhode Island General Law Chapter 172: Electronic Signatures and Records Act*. In the 1999 session, a bill was introduced that specified the procedures that would have to be in place for electronic commerce transactions to be valid, and specified as well the agencies responsible for implementing and monitoring the procedures. Although this bill did not pass during the 1999 session, it is expected to receive more focused attention in the 2000 session.

A major breakthrough in both convenience and productivity will take place once the state introduces “purchasing cards,” whereby, state employees can purchase specific items that are on contract with particular vendors, using a credit card rather than being required to initiate a purchase requisition for each small purchase. The state’s Controller estimates that currently his staff processes some 70,000 paper transactions each year for a total purchase value of \$27 million. The estimated cost of each transaction is \$10. Use of a purchase card should reduce that transaction cost to half of the current cost and should reduce the number of transactions to almost 15,000, for a significant dollar savings to the state.

Goal Area 6: Safeguard Existing Service Levels

As we move forward into new areas of information technology and information access, it is essential that state government pay proper attention to maintaining required services both to state agencies themselves and to the public. For a long time the information technology employees were not encouraged to offer innovative solutions to new issues; however, they were always required to institute modifications to existing program code or to respond to legislative mandates or changes in regulations or procedures. Some of these requirements also had to be implemented within a very short time frame.

Over the past few years, the IT staff have been required to do not only the kinds of activities that they have always been accustomed to, but also to handle the Y2K issues, to move from a primarily mainframe-based system to a distributed system, and to cope with the increasing demands from customers for fast and accurate response. In addition, the speed of change in the technology itself has required grasping new ideas at an ever faster pace, while requiring maintenance of existing skills to perform existing routines. A third hazard has been the inability of state government to hire enough new employees to allow transfer of skills and knowledge that existing employees have gained over the years. This is due to both the shortage of available workers with the requisite skills who are willing to work for state government when they can work for private industry at far better pay and working conditions, and to the fact that state government has a ceiling on the number of state employees it can maintain at any time.

We are extremely fortunate that our staff is committed to quality service and is highly qualified to produce it. Many of the staff have also been with the state for many years

and have intimate knowledge of the state's processes as well as the many modifications that have been made to the existing systems.

During this past year we have been able to cope with the increasing demands on our services (while operating with even fewer state staff than were employed as recently as three years ago) by utilizing resources from the Master Price Agreements mentioned in the early part of this report. One of the MPAs is for technical support services, which includes programming support, help-line support, and the like. Since OLIS is responsible for providing core services to many state government agencies, we have deployed our experienced staff to areas requiring in-depth knowledge of state government and its services, and have used the contract employees, under state staff supervision, to maintain existing on-going services. We expect that given current limitations on the number of authorized state government employees, we will increasingly rely on outside contract employees for these activities.

FUTURE ACTIVITIES

During FY 2000, we expect to complete all Y2K required activities. We expect, given the level of accomplishment so far, that at most there will be minor disruptions to state operations, and that these can be remedied with little significant effort.

Also during FY 2000, we intend to complete the statewide telecommunications network backbone among the three major hubs: the Capitol Complex, the Howard Complex, and the Johnston Computer Center. We intend to propose a bond issue to allow the state to catch up with the information technology capacity that was neglected for so long. We also intend to address security issues around access to information, data security, and issues relating to disaster recovery and protection.

During FY 1999, the Information Resources Management Board responded to a survey prepared by the Chief Information Officer concerning priorities for policy development. The two areas that rose to the top of the priority list were policies relating to **access** and **security**. The Board, together with OLIS staff, will be addressing these two areas in the coming year.

A major effort during FY 2000 will be to identify a set of core services to be provided to state government and to identify the cost of those services. Our intent is to make the IT unit into a service bureau for state government, whereby, agencies know in advance what the cost of a particular service is, what level of service they can expect for that cost, and what the service standards are that they can expect. Our intent is that OLIS provide or contract for the core services, and that individual agencies are responsible for any services they require beyond that. OLIS is available on a consultant basis to assist agencies in identifying their needs and in determining to what extent they can receive needed services from OLIS and to what extent they need to find external assistance. Much of the external assistance will be available through contractual arrangements already in place or to be instituted through OLIS.

ISSUES

As state government, and the rest of the world, enters the new millennium, it becomes increasingly obvious that technology will play an increasing role in all our activities. For that reason, state government must invest in resources—both human and technological—that will encourage the state to perform its many functions as efficiently and effectively as possible, while increasing customer satisfaction with both the amount and the quality of information delivery.

To date there seems to be little understanding on the part of decision-makers who make resource allocations that technology pervades everything that government does, and that government must be equipped to participate on an equal footing with the private sector in providing information and services. The current approach of limiting the number of state employees, although understandable, is short-sighted in that it does not provide for transferring the knowledge and skills of existing workers to new employees who can then move forward without the continual “learning curve” required with the use of outside contract employees.

Another area where there has been little attention paid by state government as a whole, though individual agencies that have had access to federal appropriations have made significant strides, is that of addressing the need to upgrade equipment on a regular basis and the need to retrain staff members to understand and properly use the new equipment and software.