

***State of New York
Office of the State Comptroller
Division of Management Audit***

**NEW YORK'S PREPARATION
FOR THE YEAR 2000**

**GOVERNOR'S TASK FORCE ON
INFORMATION RESOURCE
MANAGEMENT AND SELECTED
STATE AGENCIES AND PUBLIC
AUTHORITIES**

REPORT 96-S-84



H. Carl McCall
Comptroller



State of New York Office of the State Comptroller

Division of Management Audit

Report 96-S-84

Mr. James G. Natoli
Chairperson
NYS Office for Technology
State Capitol
Albany, New York 12224

Mr. Michael H. Urbach
Commissioner
NYS Department of Taxation & Finance
Building #8 - State Office Campus
Albany, New York 12239

Mr. James T. Dillon
Acting Commissioner
NYS Department of Labor
Building #12 - State Office Campus
Albany, New York 12239

Mr. Richard Jackson
Commissioner
Department of Motor Vehicles
Empire State Plaza
Swan Street Building
Albany, New York 12228

Mr. Edward R. Hallman
Executive Deputy Commissioner
Division of Criminal Justice Services
#4 Tower Plaza
Albany, New York 12203-3702

Mr. Lawrence J. Reuter
President
New York City Transit Authority
370 Jay Street
Brooklyn, New York 11201

Mr. E. Virgil Conway
Chairman
Metropolitan Transportation Authority
347 Madison Avenue
New York, New York 10017

Gentlemen:

The following is our report addressing New York State's preparation for the Year 2000.

This audit was done according to the State Comptroller's authority as set forth in Section 1, Article V and Article X, Section V of the State Constitution and Section 8, Article 2 of the State Finance Law. Major contributors to this report are listed in Appendix A.

*Office of the State Comptroller
Division of Management Audit*

October 14, 1997



Executive Summary

New York's Preparation For The Year 2000 Governor's Task Force On Information Resource Management And Selected State Agencies And Public Authorities

Scope of Audit

A tremendous challenge currently faces State agency and public authority (agency) information system organizations: agency managers must prepare their computer systems to cope with dates beyond December 31, 1999 – otherwise known as the Year 2000 problem. The root of this problem is that until relatively recently most computer programs were designed to use only two digits to designate the year, and therefore, cannot determine the century. This means that a computer in the year 2000 might calculate that a person born in 1997 was 97 years old, rather than 3 years old. If this situation is not corrected, fundamental operations on computer systems will begin to fail or produce incorrect results.

The sheer volume of computerized business processes in agencies and the diversity of hardware platforms and of computer programs at these agencies, all make solving this time-critical problem an imposing task. Therefore, if agencies do not make the necessary changes in time, the delivery of a wide range of agency services - from calculating benefit payments to maintaining criminal history and motor vehicle records - could be jeopardized.

In April 1996, the Governor's Task Force on Information Resource Management (Task Force) was assigned the responsibility of coordinating the approach State entities take to resolve Year 2000 issues. (In August 1997, legislation formally changed the name of the Governor's Task Force on Information Resource Management to the New York State Office for Technology.) While agencies remain ultimately responsible for making the necessary Year 2000 changes, Task Force efforts are intended to broadcast the need to address this problem and to advise agencies about how to do it. Based on industry estimates of how much it will cost information technology groups to correct Year 2000 problems worldwide, Year 2000 compliance statewide could potentially cost hundreds of millions of dollars.

Our audit addressed the following question about New York State's preparations through April 16, 1997 for resolving the Year 2000 problem:

- Are the agencies' Year 2000 compliance efforts adequate to ensure that public services are not materially interrupted because of the turn of the century?

Audit Observations and Conclusions

There is a real risk that services provided by agencies to the public will be disrupted at or before the turn of the century unless much more effort and resources are devoted to address the Year 2000 problem. We found that

agencies were generally in the early stages of addressing the Year 2000 date change problem. We also found that, while the Task Force's achievements during the past year have been commendable, it needs to increase its monitoring role over Year 2000 efforts, obtain accurate cost estimates from agencies and improve the ways it communicates with agencies and within the Task Force.

To determine the extent of the State's progress in addressing the Year 2000 problem, we sent a questionnaire to all the agencies and authorities on the Task Force's mailing list. We patterned our questionnaire on the seven-phase Year 2000 project model developed by The Gartner Group, Inc., recognized experts in the information technology field, and suggested by the Task Force for agencies to follow. According to the results of our survey, agencies were aware of the Year 2000 problem; but, as of January 1997, most of them were still in the early stages of solving it. To further examine agencies' actions to cope with the Year 2000 problem, we also visited four State agencies (the Departments of Motor Vehicles, Labor, Taxation and Finance, and the Division of Criminal Justice Services) and one authority (NYC Transit Authority). We found that Taxation and Finance and the Transit Authority had made good progress in their Year 2000 programs, and should be year 2000 compliant if they continue with their planned efforts. However, the other three agencies, whose computer systems handle critical public services, had much to do to achieve compliance. We recommended that these agencies intensify their efforts to become compliant and ensure the continued service of their critical computer systems. (See pp. 5-10)

During its relatively short existence, the Task Force has succeeded in raising Year 2000 awareness. However, to ensure State services continue without interruption, the Task Force should take a more active role in monitoring agencies' Year 2000 efforts. We believe that this is essential, given both the time-sensitive nature and potentially substantial expense of preparing for the Year 2000, and the implications of not timely solving the Year 2000 problem. We recommend that the Task Force review agency plans and progress reports for accuracy and completeness. Where critical problems are not addressed by the agencies, the Task Force should be prepared to take corrective actions through the Director of State Operations. To do this effectively, the Task Force should make the Year 2000 problem its top priority and dedicate more resources to work on it. We also recommend that the Task Force obtain scope of work information from agencies so that a projection of the total cost of the Year 2000 effort can be available for use in the preparation of the State's budget. Finally, we recommend that the Task Force improve all avenues of communication; that is, within the Task Force itself, with the appropriate managers at all State agencies and local governments, and in a Year 2000 Web site with more information. (See pp. 11-17)

Comments of Agency, Authority and Task Force Officials

Task Force and agency officials, generally agreed with our findings and recommendations. The Task Force has made 2000 compliance the State's top technology priority. Officials of the Division of Criminal Justice Services and the Departments of Labor and Motor Vehicles indicated that since the conclusion of our audit, substantial progress has been made to overcome problems identified in our report.

Contents

Introduction	Background	1
	Audit Scope, Objective and Methodology	2
	Response of Agency, Authority and Task Force Officials	3

Agencies' Progress in Reaching Year 2000 Compliance	5
--	-----------	---

The Task Force's Coordination of Year 2000 Project Efforts Statewide	Project Management Activities	11
	Communications	15

Appendix A	Major Contributors to This Report
-------------------	-----------------------------------

Appendix B	Comments of Governor's Task Force of Information Management Officials
-------------------	---

Appendix C	Comments of Department of Motor Vehicles Officials
-------------------	--

Appendix D	Comments of Department of Labor Officials
-------------------	---

Appendix E	Comments of Division of Criminal Justice Services Officials
-------------------	---

Appendix F	Comments of New York City Transit Officials
-------------------	---

Appendix G	Comments of Department of Taxation and Finance Officials
-------------------	--

Appendix H	Comments of Metropolitan Transportation Authority Officials
-------------------	---

Introduction

Background

A tremendous challenge faces State agency and public authority (agency) information system organizations over the next two and one-half years: they must prepare their computer systems to cope with dates beyond December 31, 1999, otherwise known as the Year 2000 problem. Since computers have become widely integrated into the operations of modern society, the impact of this problem is extensive. Computer processors are used in everything from video cassette recorders to automobiles and jet aircraft. Likewise, computer processing has become fundamental to State operations. Whether their jobs involve processing payroll or providing public safety, agency employees use computers to improve their productivity and to enhance the quality of the services they deliver to the public.

In New York State, the Governor's Task Force on Information Resource Management (Task Force)¹ is the organization serving to coordinate the approach State entities will take in resolving Year 2000 issues. Created in January 1996, the Task Force has three primary goals: to save State resources; to increase interagency and intergovernmental communication; and to improve citizen and private sector access to State government. In April 1996, the Task Force also assumed responsibility for an initiative to organize the State's efforts to resolve Year 2000-related problems. Agencies are ultimately accountable for their own progress in resolving Year 2000 issues. However, the Task Force serves to coordinate the approach used within State government to reduce any duplicative work efforts across agencies, to provide a mechanism to identify common statewide Year 2000 issues and to develop generalized solutions.

The root of the Year 2000 problem is that most computers are designed to use only two digits to designate the year. For example, the year 1997 is represented in most computer systems as "97." The two digit convention came about as a means to conserve computer storage space that was once at a premium, but is now relatively inexpensive. However, even as computing evolved and storage costs dropped, this convention remained in widespread use. Because of this fact, computer programs in use today generally cannot determine the century. If this situation is not corrected, fundamental operations on computer systems will begin to fail, or produce incorrect results. For example, when a computer is given two dates and is asked to

¹ In August 1997, legislation formally changed the name of the Governor's Task Force on Information Resource Management to the New York State office for Technology

perform an age calculation, it will automatically subtract the lower number from the higher one. When this request is processed in the Year 2000, however, a computer may calculate that a person born in 1997 is 97 years old instead of three years old.

The Year 2000 problem has both a broad scope, and broad implications for many State operations. The scope of the issue within New York State is imposing because of the sheer volume of computerized business processes, the diversity of hardware platforms, from mainframes to personal computers, and the thousands of computer programs - comprising millions of lines of computer code - in use at agencies. The Year 2000 issue may affect agency calculations and effective dates for benefits, such as welfare and unemployment, as well as employee payroll/personnel transactions. It may also affect many time-related mechanisms, such as expiration dates for licenses, maintenance of criminal histories and repair schedules for public transportation.

The time frame in which to address the Year 2000 problem is critical, and the solutions will be expensive. The Gartner Group, Inc. (Gartner), an internationally recognized technology research firm, states that, without corrective action, 90 percent of all computer applications will fail or create incorrect results by the year 2000. Gartner also predicts fewer than 50 percent of information technology organizations will have cleaned up their application portfolios by the end of 1999. Fixing the problem will require tedious and expensive corrections to millions of lines of software code. On average, Gartner estimates that information technology groups will spend \$1.10 per line to analyze and correct the Year 2000 problem. Therefore, overhauling State and local government computer systems to cope with the Year 2000 problem could potentially cost hundreds of millions of dollars.

Audit Scope, Objective and Methodology

We audited the ongoing efforts of State agencies and public authorities (agencies) to address the Year 2000 problem through April 16, 1997. The objective of our performance audit was to determine whether the State's Year 2000 compliance efforts are adequate to ensure services are not materially interrupted. To accomplish our objective, we reviewed Task Force plans and activities relative to coordinating agency efforts, establishing guidance for Year 2000 projects, and monitoring statewide progress. We also conducted a statewide survey to assess agency progress in implementing Year 2000 conversion activities. In addition, we selected five organizations within State government and reviewed their efforts to convert their systems and applications to Year 2000 compliance. We did not assess the readiness of local governments to deal with the problem.

We conducted our audit in accordance with generally accepted government auditing standards. Such standards require that we plan and perform our audit to adequately assess those operations of the agencies which we include in our audit scope. Further, these standards require that we understand the agencies' systems of internal control structure and compliance with those laws, rules and regulations that are relevant to the operations which we include in our audit scope. An audit includes examining, on a test basis, evidence supporting transactions recorded in the accounting and operating records and applying such other auditing procedures as we consider necessary in the circumstances. An audit also includes assessing the estimates, judgments and decisions made by management. We believe that our audit provides a reasonable basis for our findings, conclusions and recommendations.

We use a risk-based approach when selecting activities to be audited. This approach focuses our audit efforts on those operations that we have identified through a preliminary survey as having the greatest probability for needing improvement. Consequently, by design, finite audit resources are used to identify where and how improvements can be made. Thus, we devote little effort to reviewing operations that may be relatively efficient or effective. As a result, our audit reports are prepared on an "exception basis." This report, therefore, highlights those areas needing improvement and does not address activities that may be functioning properly.

Response of Agency, Authority And Task Force Officials

A draft copy of this report was provided to Task Force officials, as well as the four State agencies and one public authority we audited, for their review and comments. Their comments have been considered in preparing this report and are included as appendices.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the Chairperson of the New York State Office for Technology and the heads of the Department of Taxation and Finance, the Department of Labor, the Division of Criminal Justice Services, the Department of Motor Vehicles, the Metropolitan Transportation Authority and the New York City Transit Authority shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons therefor.

Agencies' Progress in Reaching Year 2000 Compliance

For New York State to ensure services to its citizens are not interrupted, the computer systems and data used by State agencies and authorities must be Year 2000 compliant. The State must make the necessary commitments of time and resources now to avoid critical systems failures and a disruption of continuous service delivery in the very near future.

Since the Task Force began coordinating an approach to solving the Year 2000 problem in April 1996, it has taken steps to broadcast the need to address this problem and to advise State entities about how to do it. To assess the progress of Year 2000 efforts thus far, we sent survey questionnaires in early December 1996, to the 81 agencies on the Task Force's mailing list. The results of our survey showed that, for the most part, State entities were only in the early stages of addressing the Year 2000 date change problem. Therefore, State government needed to commit significant additional time and money to become Year 2000 compliant.

We patterned our survey questionnaire on the seven-phase Gartner approach. This technology research firm has developed a generalized framework for project management related to solving information technology problems. The Gartner approach assigns a relative percentage of project effort to each of seven phases in their Year 2000 date change project model.

The Gartner phases and relative percentage of effort are as follows:

- | | |
|--|-------------------------|
| 1) Awareness (2%); | 5) Modification (20%); |
| 2) Inventory (1%); | 6) Testing (45%); and |
| 3) Project plan (4%); | 7) Implementation (8%). |
| 4) Examination, analysis and design (20%); | |

Because of the urgency of the Year 2000 situation, these tasks do not have to be completed sequentially (i.e., modification of critical applications may take place prior to completion of an inventory of all systems).

We used the Gartner approach in our survey device for several reasons. First, the Task Force suggested that agencies use the Gartner approach in managing their respective Year 2000 projects. Second, this approach is also useful in evaluating the progress an organization has attained in its Year 2000 project. To more fully assess agency efforts, we also added selected questions to our survey related to other practices recommended for managing and monitoring the progress of such projects (i.e., the creation of project teams and the establishment of an independent function to monitor project progress).

We received a response rate of over 96 percent (78 of 81 entities responded) to our survey. As of January 1997, most of the organizations responding to our survey reported having completed awareness training and were in the process of completing a systems inventory. According to the Gartner approach, these early phases account for only an estimated three percent of the total work effort necessary to complete the project. Additionally, as the following chart shows, only 23 percent to 38 percent of the responding entities have begun the examination and design, modification, and testing phases. Since these phases accounted for 85 percent of the total work effort, and the due date was fast approaching, it was apparent that much remained to be done.

% of Agencies	Project Phases & Progress
83%	Have Provided Awareness Training to Executive Staff
33%	Have Provided Awareness Training to All Staff
19%	Have Completed a Systems Inventory
0%	Have Completed a Project Plan
23%	Report Examination, Analysis & Design In Progress
38%	Report Modifications Begun On Some Applications
35%	Report Testing On Some Applications Has Begun
50%	Report Implementation Of Some Applications Has Begun

In addition, only 22 percent of the agencies reported having developed a project team, and 21 percent have established an independent function within their organization to monitor project progress.

We also made site visits to four State agencies and one public authority to assess progress toward Year 2000 compliance. We visited the Department of Motor Vehicles (DMV), the Department of Labor (DOL), the Department of Criminal Justice Services (DCJS), the Department of Taxation and Finance (DTF), and the NYC Transit Authority (TA). Our review at these organizations corroborated the results of our survey: there existed a wide range of progress in State organizations in solving the Year 2000 problem. We briefly describe below these agencies' progress in becoming Year 2000 compliant and the potential impact on their products or services if they do not timely modify their critical applications. These agencies - like other State agencies and public authorities - must significantly increase their activities to respond to the Year 2000 problem or risk dealing with incorrect data and service interruptions.

New York State Department of Motor Vehicles

DMV's Year 2000 efforts were in the initial stages. Most of DMV's applications are written in Assembler, an early programming language which is no longer used by most information technology organizations. As a result, Assembler programmers are in short supply and organizations using that language face staffing difficulties when programming demands increase. DMV intends to have its current staff work overtime on the project, and may supplement their efforts by hiring retirees who are knowledgeable in Assembler. Although State funds may become available to help fund DMV's Year 2000 initiative, DMV had not completed a plan defining its staffing needs and associated costs. Without this plan, DMV is at significant risk of having its mainframe systems fail or produce erroneous results. Systems at risk include the Vehicle Registration and Driver Licensing systems. Failure of these applications could result in improperly registered and titled vehicles, or incorrect license information on DMV records for some of the State's ten million drivers.

Response of DMV Officials to Audit: DMV officials stated that significant progress has been made and that several actions have been taken to address mission-critical mainframe systems. However, the officials add that they still remain at risk and more resources will have to be dedicated to the Year 2000 effort.

Auditors' Comments: DMV must continue its progress and secure needed resources to ensure the accurate continuance of vital public services.

New York State Department of Labor

DOL had yet to select an overall approach for making Year 2000 modifications to its mainframe computer-based programs. It had not decided whether to use its own staff or hire a consultant to do the work. A timely decision was necessary in either case. If DOL used in-house staff, these staff would have little time to learn the extent of the problem and implement the required modifications to the code. If officials planned to hire a consultant, they needed to take immediate action, since vendors may become unavailable due to industry demand. If DOL had not chosen an approach quickly, the agency was at significant risk of having its mainframe systems fail or produce incorrect results. These systems include the Unemployment Benefits and the Employer Account systems. Failure of these applications could result in the inability to timely process unemployment insurance claims for almost 600,000 New Yorkers, or the inability to process transactions and transfers of funds to and from the Federal Unemployment Trust Fund and the State's General Fund.

Response of DOL Officials to Audit: DOL officials indicate that a decision was made to hire a consultant in March 1997, and the contract was awarded to the selected vendor in July 1997. DOL stated that the Department and the consultant have completed much of the preliminary assessments and will shortly begin the remediation phase of the Year 2000 project.

Auditors' Comments: DOL's reported progress must be sustained to ensure timely and accurate continuance of vital functions including unemployment insurance payments.

Division of Criminal Justice Services

DCJS was developing an inventory of applications and had reviewed the program modules in one subsystem to scope out the size of the project. It had not completed any substantive work on Year 2000 program code modifications. In addition, DCJS has written some programs in an older version of COBOL which might need replacing, unless it can develop some special system configurations to allow their continued use. If these programs need replacement, they will significantly increase the scope of the DCJS work, and increase the risk that its mainframe systems could fail or produce incorrect results. Some DCJS business applications are critical to State government, including the Computerized Criminal History and Automated Fingerprint Identification systems. Failure of these systems could result in the inability of police agencies and courts to obtain criminal histories data. Currently, these entities make about 65,000 inquiries daily to the DCJS criminal history file.

Response of DCJS Officials to Audit: DCJS officials responded that applications have been inventoried and a plan for remediation has been established. They added that remediation plans have begun for the most critical applications.

Auditors' Comments: DCJS's reported progress must be sustained to ensure timely and accurate continuance of vital functions such as providing criminal histories and fingerprint identification.

New York City Transit Authority

The TA appeared ready to achieve Year 2000 compliance on its mainframe and mid-range computers. The TA had purchased and used software to inventory lines of code and identify data fields that require modification. In addition, the TA developed policies, procedures and time lines for the Year 2000 project. Statements of Work (documents describing job requirements for use in acquiring consulting services) were under development to obtain services for converting programs for the TA's mid-range platform. However, at the completion of our review, project plans had yet to be developed to the point of matching tasks to resources for those projects to be undertaken directly by the TA. In addition, work on the personal computer platform was in its initial stages. Overall, however, with close project monitoring, the TA should be able to modify its systems in time for the year 2000.

The TA has many business applications that are critical to its operations, such as the Materials Management System, Train Trouble System and Track Walker Inspection System. It is important for the TA to continue its timely Year 2000 efforts because failure of TA systems could have the following effects on customer service and safety: stock-outs of materials necessary to maintain a transit system which carries about five million people daily; the inability to respond to subway system problems; and difficulties in scheduling, monitoring and resolving the results of track inspections.

Response of TA Officials to Audit: TA officials responded that the Year 2000 project is one of the top technological priorities and it continues to take steps to ensure that all software and hardware will be Year 2000 compliant by the turn of the century.

New York State Department of Taxation and Finance

DTF work plans for its mainframe computer systems appeared complete, reasonable and achievable if appropriately managed. DTF provided programmers with written procedures and guidelines for searching and correcting system code. A project management system was in place. Modifications to system code were underway with plans to complete most changes by the end of 1997. DTF has many business applications considered critical to State government, including the Personal Income Tax (PIT), Sales Tax, and Withholding Tax systems. It is important for DTF to continue its timely Year 2000 efforts because failure of DTF systems could result in the agency's being unable to process personal tax returns timely, pay sales tax monies to localities on time, and accurately reflect payment of taxes in employer accounts.

Response of DTF Officials to Audit: DTF officials reported that the Year 2000 project is the top priority technology project at the Department. They added that it will remain so until all critical systems are compliant.

During our visits to these agencies, we also noted that none of them had begun to assess the work that may need to be done on ancillary systems involved in essential operating functions, such as controlling elevators, operating building security and working tunnel ventilation systems. All the agencies we visited expressed a common concern about their ability to deal with Year 2000 issues because of a lack of both personnel and funding.

Agencies remain ultimately responsible for achieving compliance with Year 2000 requirements, and we urge them to complete their projects for doing so as early as possible. However, we believe there are a number of related reasons for the State's overall lack of progress in addressing the Year 2000 problem. The Task Force, which is coordinating State government's approach to solving this problem, is a new organization. Despite the extremely time-sensitive nature of the Year 2000 problem, the Task Force did not make solving this problem its top priority. Further, because State government is decentralized and agencies are very diverse, the Task Force's widely distributed information and guidance has not always been useful for individual agencies. In the next section of this report, we discuss the causes for the State's lack of progress in solving Year 2000 issues, and propose solutions to enhance project management and funding, as well as improve communications.

Task Force Officials Response to Audit: Task Force officials indicated that on July 2, 1997 the Governor issued a directive that New York State Operations number one priority is Year 2000 compliance.

The Task Force's Coordination of Year 2000 Project Efforts Statewide

The Year 2000 problem is a very large, time-critical issue that requires extensive planning and management at both the Task Force and agency level. Agency officials must recognize the Year 2000 problem, identify the amount of work that must be done in their agencies and develop cost estimates for their modification efforts. Agencies can then plan how to fund their projects and devote personnel to do the work. The Task Force has taken numerous steps to help agencies become Year 2000 compliant. However, to ensure that agencies achieve this goal, it is essential that the Task Force dedicate more staff to work on Year 2000 issues and should more actively monitor agencies' progress in reaching Year 2000 compliance. Where monitoring shows that critical problems are not addressed by the agencies, the Task Force should be prepared to take corrective actions through the Director of State Operations. The Task Force should also obtain scope of work information from agencies to develop an overall cost estimate so that adequate funds can be appropriated. Finally, the Task Force should improve communication between its Steering Committee and other Task Force members, ensure its information goes to appropriate personnel at all agencies and update and improve its Web site.

Project Management Activities

Since it began its Year 2000 efforts in April 1996, the Task Force has:

- Conducted an Executive Awareness Seminar for agency heads and deputies to raise their awareness of the Year 2000 problem;
- Issued policies advising agencies to include Year 2000 compliant language in proposals and contracts, and provided templates for that purpose;
- Established a Statewide Steering Committee to create an inter-agency structure to develop statewide strategies and coordinate project activities;
- Provided agencies a generalized framework for project management based on a seven phase model developed by the Gartner Group;
- Created four workgroups to provide a forum for sharing strategies and solutions for users with similar technologies;
- Conducted meetings with agencies on awareness, risk assessment (including statewide risk assessment information), project goals and objectives, vendor compliance and procurement/contracting issues;

-
- Assisted the Office of General Services with centralized State contract issues, including making Year 2000 consulting services available through a mini-bid process;
 - Developed a Year 2000 area on its Internet web page for disseminating information;
 - Identified the State's "Top 40" priority systems based on health, safety and welfare considerations; and
 - Began developing strategies to retain, compensate and recruit information resource management staff.

Overall, the Task Force has accomplished a great deal in their short time in existence. However, as noted earlier in this report, agencies were generally only in the early stages of addressing the date change problem and required significant efforts to become Year 2000 compliant.

Throughout our audit, Task Force officials characterized the role of the Task Force as that of a facilitator rather than a control entity. Accordingly, it adopted a collaborative approach to identify common statewide Year 2000 issues and to develop generalized solutions by bringing agencies together for joint problem-solving and information sharing.

Recently, Task Force officials told us that they are moving toward more project management activities. For example, the Task Force has drafted a Year 2000 Project Plan that includes activities such as monitoring progress, helping agencies obtain resources and developing a formal methodology for agencies that have not started their Year 2000 effort. In addition, the Task Force plans to compile a quarterly status report on the 40 priority applications starting in May 1997, and will include the other high priority State systems beginning in September 1997.

While the Task Force plans to monitor agency progress and to assist agencies in finding solutions to Year 2000 obstacles, it does not plan on establishing a monitoring capacity that corroborates agency progress in achieving Year 2000 compliance or taking corrective actions where necessary.

We believe that such monitoring is necessary considering the absolute time limit on Year 2000 projects and their potential to command significant resources from the State budget. For example, in December 1996, the Task Force requested that agencies designate a project manager, complete application inventories and develop project plans. However, since the Task Force did not request copies of the inventories or project plans, it could not assess agencies' progress in these areas or ensure the accuracy and

completeness of these important Year 2000 initiatives. Our questionnaire results showed that few agencies had actually completed these steps. As a result, the State may not have an accurate assessment of its progress toward solving the Year 2000 problem and unexpected system failures and public service problems could occur.

We also believe the Task Force cannot establish a reliable monitoring function without adequate resources. The Year 2000 challenge should be a top priority for most information resources management organizations. However, only 1.5 full-time equivalent (FTE) staff of the 11 member Task Force are assigned to the Year 2000 project. By contrast, other states have created Year 2000 offices with double or quadruple the number of staff the Task Force has dedicated to the project. Additional resources are necessary not only for carrying out effective monitoring, but also for providing increased information and assistance as we approach the Year 2000.

Response of Task Force Officials to Audit: Task Force officials responded that priority systems are being monitored on a quarterly basis and the Director of State Operations is receiving regular status reports on compliance progress. They added that agencies will be directed to document contingency plans by the end of 1997 for those systems which may not be compliant prior to failure dates.

Project Funding

Requests for project funds should be based on accurate cost estimates. Generally, cost estimates are provided in terms of lines of code (LOC). These estimates are based on the inventory of an agency's systems and range from as little as \$.18 to \$2.50 per LOC. The Gartner Group, Inc. uses an estimate of \$1.10 per LOC. The costs differ based on the relative complexity of the systems and the personnel (whether contractors or in-house resources) who will do the work. As the year 2000 draws near and contract resources become committed, the costs of using contractors are expected to rise dramatically.

Currently, agencies fund their Year 2000 conversion projects with current appropriations. However, the Task Force has requested \$50 million in Certificate of Participation (COPs) funding to help agencies meet Year 2000 costs. The COPs funding proposal sets aside \$10 million for the 1997/98 fiscal year, \$20 million in 1998/99 and \$20 million in 1999/2000.

Task Force officials told us the \$50 million COPs request was based on the Task Force's review of the State's 40 priority applications and was included in this year's Executive Budget. However, the Task Force, using information supplied by the agencies, compiled an estimate of \$100 million to complete

modifications for those same applications. Using the Gartner estimate of \$1.10 per LOC, project costs for the agencies we visited alone will approach \$47 million based on the LOC inventories those agencies provided us. The Task Force is currently developing a refined cost estimate for the State's top applications using quarterly status reports and a request to agencies asking for total lines of code. However, at this time, the State lacks an accurate estimate of statewide costs for the Year 2000 project - and these costs could be significantly greater than \$100 million identified to date by the Task Force.

An accurate cost estimate of the Year 2000 problem statewide is especially important to give the State Legislature the information needed for a timely and sufficient appropriation. Without this estimate, there is increased risk that some important systems may not be modified. Consequently, the Task Force should request agencies to provide systems inventory and LOC information as soon as feasible so it can develop an accurate cost estimate.

Response of Task Force Officials to Audit: Task Force officials responded that agencies will provide overall cost estimates for their compliance projects as part of the next quarterly status review.

Staffing Plans

The Task Force is currently developing strategies to retain, compensate and recruit enough information technology staff to correct critical systems on time. In addition, the Task Force is working with the Division of the Budget, the Department of Civil Service, and the Governor's Office of Employee Relations to develop a formal plan to meet staffing needs. Strategies include: providing overtime eligibility for working on the Year 2000 project, bringing back State retirees to work on the project, and allowing incentives, such as flexible hours and telecommuting from home. In addition, the Department of Civil Service will monitor monthly vacancy rates in the information technology field and report increased separation rates to the Task Force. We view the Task Force's efforts in this area as sufficient at this time, but caution that the Task Force will need to closely monitor efforts to ensure these strategies achieve the desired effect.

Communications

To effectively coordinate statewide Year 2000 project efforts, the Task Force must establish good communications, both within the Task Force itself and with other State governmental agencies that look to the Task Force for assistance. The Task Force can further improve communications by updating and enhancing its Web site to make Year 2000 information more readily available.

Intra-Task Force Communications

The Task Force's Year 2000 Steering Committee (comprised of Task Force and agency representatives) established Year 2000 workgroups, composed of agency representatives, to be a resource for agencies with similar technology environments. There are two mainframe workgroups, a mid-range workgroup and a LAN-based workgroup all seeking to provide a forum for sharing ideas, strategies and solutions to common problems. Participation in these workgroups is strictly voluntary.

We found that some workgroup members believed there was not enough communication and interaction between workgroups and the Steering Committee. Two workgroup leaders did not view the Steering Committee as effective in coordinating tasks that affect more than one agency, such as investigating software licensing agreements. Also, one workgroup leader stated that the Steering Committee has not provided guidance as to their expectations so that the workgroups can set their direction and evaluate their progress. As a result, overall Year 2000 efforts may not be as efficient and effective as possible.

Response of Task Force Officials to Audit: Task Force officials responded that they have instituted statewide project manager meetings and inter-steering committee and work group meetings to facilitate intra-Task Force communications.

Task Force and Agency Communication

The Task Force, in promoting awareness of the Year 2000 problem and addressing the Year 2000 project on a State level, has sent many memoranda to agencies, authorities, and commissions. To date, the Task Force has sent out a risk assessment survey, information on various workshops and conferences and offers to agencies to join workgroups. It has used a mailing list to provide this information.

We compared the Task Force's mailing list to a listing of agency codes on the State's accounting systems and found the Task Force mailing list does not include all State authorities and quasi-State entities. In all, we found that 14 entities were not included in Task Force mailings. Noticeably absent from the Task Force listing were the Capital District Transit Authority, the NYS Bridge Authority, and the NYS Teachers Retirement System. In addition, when the Task Force sent out its mailings, it sent them to the attention of the agency head and not to the information technology unit. In some instances, mailings apparently never made it to the information technology units.

Task Force officials stated that the initial mailing list included Executive

Branch agencies plus other entities that had asked to be included on the list. In addition, they thought that agency management would distribute mailed information to the information technology units. We found one agency's (MTA) information technology units was not aware of the Task Force's existence as a resource until they received our survey. Task Force officials informed us they have updated their mailing lists, and continue to do so. In addition to notifying agency top management, the Task Force officials stated that mailings are now being sent directly to agencies' Directors of Information Technology.

Task Force officials also acknowledged they have concentrated their efforts on State agencies and authorities, and have not communicated Year 2000 information to local governments. As of April 1997, the Task Force had provided only a consultant's videotape on the topic to localities, and the Task Force's standing committee on localities had yet to address this issue. Because of a lack of Task Force focus on local governments, many municipalities may not be aware of the Year 2000 issue, or of the Task Force as a resource. As a result, local governments could fall behind in their Year 2000 conversion efforts to the point that service delivery systems fail. At the close of our field work, Task Force officials told us the standing committee on localities will be addressing the needs of the local governments on the Year 2000 issue in the near future.

Task Force Internet Web Site

The Task Force has dedicated space on its web site to disseminate information on its Year 2000 activities and provide links to similar locations. For the site to serve its purpose efficiently, maintenance and development of the site needs to be a Task Force priority.

We found that the site was not always being kept current and may not be as useful as possible. For example, the Task Force posts the minutes of the meetings of workgroups on its site. We found that minutes from some workgroups meeting were not being posted. For one group, meetings held in September 1996 still had not been posted as of April 1997. We also compared the features of the Task Force's Year 2000 site with similar sites for other states. We noted the following features on other sites which the Task Force may want to include on its own site.

- 1) Year 2000 questionnaires
- 2) Policies and Standards
- 3) Bulletin boards and chat rooms
- 4) Templates for agency use on Year 2000 projects including:
 - Inventory development
 - Budget requests

-
- Project methodologies
 - 5) Statewide inventory results
 - 6) Results of monitoring efforts including:
 - Spreadsheets of agency progress
 - Quarterly status reports
 - 7) Links to agency sites that detail agency progress on Year 2000 efforts
 - 8) Estimated Statewide Year 2000 costs and the basis for those figures (standardized estimates from each agency, also posted)
 - 9) Links to “Best Practices” sites for each project phase
 - 10) A counter to quantify site use

As discussed earlier in this report, the Task Force has very limited resources dedicated to the Year 2000 project, and the lack of maintenance and development of their Year 2000 site can be attributed to this condition. As a result, the usefulness of the site to the Task Force’s customers, and the Task Force itself, is limited. Task Force officials told us they do intend to devote more effort to the site.

Recommendations

Department of Motor Vehicles

1. Complete and implement a plan that defines staffing needs and associated costs for the Year 2000 project.

Department of Labor

2. Make and implement the decision whether to use in-house staff or a consultant to complete the Year 2000 project.

Department of Criminal Justice Services

3. Complete the inventory of applications. Establish and implement a plan to complete Year 2000 program code modifications.

New York City Transit Authority

4. Continue implementation of Year 2000 project activities.

Department of Taxation and Finance

5. Continue implementation of Year 2000 project activities.

Task Force

6. Identify the Year 2000 project as the Task Force's top priority and dedicate necessary resources to the project.
7. Develop a monitoring capacity to corroborate agency progress with necessary Year 2000 initiatives. Take corrective action where critical activities have not been implemented.

Response of Task Force Officials to Audit: Task Force officials responded that statewide priority systems are being monitored on a quarterly basis and the Director of State Operations is receiving regular status reports on compliance progress. They added that agencies will be directed to document contingency plans by close of business 1997 for systems which may not be compliant prior to failure dates. The Task Force did not respond to our recommendation for corrective action where critical activities have not been implemented.

Recommendations (continued)

Auditors' Comments: We continue to believe that the Task Force must be prepared to take corrective actions where critical activities are found to have not been implemented in a timely manner.

8. Develop and maintain an overall estimate of State funding requirements for the Year 2000 project.
9. Continue to monitor the staffing levels of agency information technology units and coordinate with other State agencies to finalize staff retention incentives.
10. Improve Intra-Task Force communications to address weaknesses cited in this report.
11. Continue to review and revise the Task Force agency mailing list to include all State and quasi-State entities.
12. Dedicate adequate resources to the maintenance and development of the Task Force's Year 2000 web site.

Major Contributors to This Report

Jerry Barber
David R. Hancox
Brian Reilly
James Brunt
James Nellegar
Robert Curtin
Nancy Varley



STATE OF NEW YORK
EXECUTIVE CHAMBER
ALBANY 12224

Office of the Comptroller
State of New York

SEP 4 1997

RECEIVED
SEP 11 1997

Governor's Task Force
on Information Resource Management

JAMES G. NATOLI
CHAIRPERSON

CAMARON J. THOMAS
DIRECTOR
OFFICE OF THE TASK FORCE

September 4, 1997

Mr. David R. Hancox
Audit Director
Office of the State Comptroller
A.E. Smith State Office Building
Albany, NY 12256

Dear Mr. Hancox:

The Office for Technology (formerly the Governor's Task Force on Information Resource Management) has received the Office of the State Comptroller's draft Audit Report (No. 96-S-84) dated August 8, 1997.

In January 1996, the Governor established the Task Force on Information Resource Management under the direction of the Director of State Operations. In April 1996, the Year 2000 Date Change Initiative was established to facilitate and coordinate New York State's millennium compliance efforts. The goals are to promote a collaborative statewide approach, reduce duplicative work efforts across agencies, identify common issues and develop generalized solutions to address the Year 2000. Agencies are responsible for ensuring that their systems are millennium compliant.

The year 2000 date change is a global problem and impacts every organization that is dependent on computer systems or imbedded technology. Experts agree that there is neither enough time or resources to make every system compliant. The Office for Technology has sought to minimize New York State's risk and to leverage our resources to ensure that those systems that are critical to health, safety and welfare are compliant.

In August 1996, the Office for Technology completed a statewide risk assessment. Agencies were asked to prioritize systems based on their ability to fulfill their mission, support critical business processes and deliver services. In December 1996, the Office for Technology identified the State's "Top 40" Priority Systems that are mission critical and must be millennium compliant, no matter what.

All of our project activities to date have been collaborative and focused on assisting agencies in bringing their systems into compliance. These activities include raising executive awareness, establishing an inter-agency steering committee and platform-based workgroups, developing staffing

SEP 4 1997 2

RECEIVED -- 08102
MAIL ROOM

strategies, requesting statewide funding, expediting the procurement process and maintaining agency projects to identify impediments to their millennium compliance efforts.

In addition, the Office for Technology has done the following:

1. On July 2, 1997, the Governor issued a directive that New York State Operations' number one priority is Year 2000 compliance and placed a moratorium on all new technology initiatives which impact an agency's ability to achieve Year 2000 compliance, other than those specifically mandated by statewide directives or required by law;
2. Statewide Priority Systems are being monitored on a quarterly basis and the Director of State Operations is receiving regular status reports on compliance progress. The quarterly status reviews will include agency-designated high priority systems effective September 1997. Agencies will be directed to document contingency plans by close of business 1997 for those systems which may not be compliant prior to failure dates;
3. Agencies will provide overall cost estimates for their compliance projects as part of the next quarterly status review;
4. The Office for Technology will continue to work with the Department of Civil Service, Governor's Office of Employee Relations and the Division of the Budget to monitor staffing trends and implement strategies to staff projects. This Office is also soliciting information directly for agencies, IRM directors and project managers on staffing separations and transfers;
5. The Office for Technology has instituted statewide project manager meetings and inter-steering committee and work group meetings to facilitate intra-Task Force communications;
6. The Office for Technology has revised its mailing list with additional State and quasi-State entities and established electronic mail distribution to disseminate information directly to agency project managers. We are developing a more comprehensive distribution list for local government which will include towns, villages, counties and related organizations;
7. Enhancing our web site to include agency best practices, links to other State resources by topic, policy updates, accomplishments and a counter to monitor site activity. We have also trained additional office staff to assist in maintaining the web page.

Sincerely,


Cameron J. Thomas



STATE OF NEW YORK
DEPARTMENT OF MOTOR VEHICLES
EMPIRE STATE PLAZA
ALBANY NEW YORK 12228

RICHARD E. JACKSON, JR.
COMMISSIONER

GREGORY J. KLINE
DEPUTY COMMISSIONER
FOR ADMINISTRATION

September 8, 1997

Mr. David R. Hancox
Audit Director
State of New York
Office of the State Comptroller
A.E. Smith State Office Building
Albany, NY 12236

Dear Mr. Hancox:

As requested, below is this agency's response to the draft audit report (No. 96-S-84) to be included as an appendix to your final report.

Since April 16, 1997, the end of the period the audit covers, we have made significant progress at the Department of Motor Vehicles. A separate and distinct, full-time Year 2000 Project Team is now coordinating all agency Year 2000 activities and is developing a project plan and master Gantt chart that addresses Year 2000 awareness and bringing PC/LAN's, mainframe and telecommunications systems, and facilities into compliance. The development of this project plan is nearing completion.

Actions that address our mission-critical mainframe systems are as follows:

- A more detailed chart of the mainframe systems is under development. We have categorized our applications in accordance with the IRM statewide top 40 directive. The first 18 applications to be brought into compliance have been selected. Five of these have been assigned to technical project managers who will each develop a detailed plan for conversion. Because the creation of these detailed plans is resource intensive, we have begun conversion of the systems before all of our mainframe applications have been charted to this level of detail.
- Mainframe tools to afford efficiencies for our Year 2000 conversion are being reviewed and evaluated for use in our environment.
- We have surveyed the DP staff and developed an inventory of their mainframe data processing skills.



Recycle. Conserved. Controlled. For Your Convenience. Guaranteed.

- Our testing plan infrastructure is under development. The plan addresses both procedural and environmental issues. Testing software has been installed. We are initiating the purchase of an additional RAID unit to provide adequate DASD for our expanded files and our major testing efforts.
- Guidelines for standardized conversion efforts have been drafted.
- A pilot project is underway. This project has aided in the development of efficiencies and standards to make the best possible use of our resources.
- We have received DOB approval and are currently interviewing candidates for vacant mainframe application programming positions necessary to launch additional Year 2000 activities.
- Resource needs and associated costs have been calculated based on rough estimates of lines of code, using the Gartner formula of conversion of 100,000 lines of code by an application developer in a year.
- We plan to hold sessions in September with our agency managers to apprise them of the current status of the problem and our progress, and to enlist their continued support in its resolution.
- We brief executive management bi-weekly on the status and progress on the Year 2000 problems.

Although there has been a great deal of activity during the last four months, we remain at risk. We are currently attempting to secure more resources for this project and looking to dedicate more of our existing staff to the Year 2000 effort.

If I can be of any further assistance, please feel free to contact me.

Sincerely,



Gregory J. Kline

bj



STATE OF NEW YORK
DEPARTMENT OF LABOR
Governor W. Averell Harriman
State Office Building Campus
Albany, New York 12240

JAMES T. DILLON

Executive Deputy Commissioner of Labor

September 8, 1997

Mr. David R. Hancox
Audit Director
Office of the State Comptroller
A.E. Smith State Office Building
Albany, New York 12236

Dear Mr. Hancox:

The Office of the State Comptrollers' (OSC) Draft Audit Report #96-S-84 does not reflect the Department of Labor's (DOL) Year 2000 progress through April 16, 1997. While it is true that the Department had not settled on an approach in February during the audit interviews, by the middle of March an approach was selected. This approach was to use the OGS Mini-Bid Process to contract with a Year 2000 remediation consultant. The Project Description was completed on April 7, 1997, and released to vendors on April 16, 1997. Since April 16, we have substantial progress. The Mini-Bids from vendors were returned to DOL and evaluated on May 14, 1997. Authorization was received from OSC on July 7, 1997, and the contract was awarded to KEANE, Inc.

While awaiting OSC approval, the Department moved forward with the following Year 2000 initiatives:

- Awareness presentations were delivered to many DOL employees. The effort to keep all DOL employees aware of our Year 2000 project progress will continue through awareness meetings and internal newsletters.
- The application inventory was inspected and those programs found to be obsolete were archived. This effort continues and is expected to result in a 10-20% reduction of the application inventory.
- Nearly 3,000 programs were identified as being written in an outdated language or requiring an unsupported environment. To date, 50% of these programs have been upgraded.
- Maintenance and enhancements activities of other applications have been suspended.



Telephone (518) 457-2270

Fax (518) 457-6908

- We have identified the Year 2000 compliant operating system software required and have taken steps to purchase it.

The Department also began the process of acquiring a testing software package in an effort to improve and minimize testing. The process began in March and the department is still waiting for final approval from OSC to purchase this software (OSC received the request on July 24, 1997).

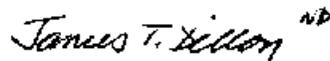
KEANE, our selected Year 2000 consultant, has brought on 6 staff members with plans to assign a total of 40 – 50 individuals during the remediation phase. The Department has assigned approximately 30 staff members to this Year 2000 initiative. Thus far, KEANE has demonstrated sound management methodology in assisting the Department of Labor. Their accomplishments are:

- Completed the Statement of Work.
- Completed the Project Plan.
- Completed all required application assessments and interviews with program staff.
- Completed the technical assessment and plan for the conversion of the Unemployment Benefit Forfeiture System. This system will be Year 2000 compliant by January 1998 when failure would occur.

On a final note, I find it of great interest that the Office of the State Comptroller has requested that DOL allow OSC to "piggy-back" on our Year 2000 contract with KEANE, Inc., less than three weeks after issuing the audit in question. Language stating that "DOL has yet to select an overall approach for making Year 2000 modifications" was inaccurate and out of date at the time it was made.

I believe greater care should be exercised to insure accuracy before release of statements such as those made in this audit.

Sincerely,



James T. Dillon
Acting Commissioner

cc: Patricia A. Woodworth



STATE OF NEW YORK
DIVISION OF CRIMINAL JUSTICE SERVICES
4 TOWER PLAGE
ALBANY, NEW YORK 12203 3702

September 8, 1997

Mr. David R. Hancox
Audit Director
Office of the State Comptroller
A. E. Smith State Office Building
Albany, NY 12236

Dear Mr. Hancox:

Thank you for your draft audit report (No. 96-S-84) regarding New York State's preparation for the Year 2000. The report makes the following recommendation concerning DCJS:

Complete the inventory of applications. Establish and implement a plan to complete Year 2000 program code modifications.

Since the auditors' visit in February 1997, DCJS has completed the inventory of the agency's applications. Further, we have established a plan for remediation of our applications and have commenced implementation of the plan for our most critical application. System and application libraries have been modified to be Year 2000 compliant and staff are now altering program modules to use the new libraries. Initial testing has been favorable.

We have also identified non-compliant hardware and are working to replace it. In addition, staff are monitoring the progress of the vendor for SAFIS (the Statewide Automated Fingerprint Identification System). The SAFIS software is proprietary. DCJS is dependent on the vendor to provide Year 2000 compliant software.

As you know, testing is a major portion of any Year 2000 compliance effort. One problem that the agency has yet to solve is acquisition of a test platform on which the system date can actually be set forward. Efforts are underway to acquire a separate testing platform to minimize the disruption upon the agency's internal and external customers. We are currently working with the Governor's Task Force on Information Resource Management and several other state agencies that use a Unisys A-series computer platform in pursuing a low cost acquisition. DCJS is also requesting COPS funding through the IRM Task Force to procure a test platform and acquire additional hardware, software, and consultant services.

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

Mr. David R. Hancox
Page 2
August 28, 1997

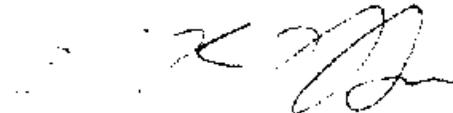
DCJS has met with its key users to discuss the long term goals of its migration plan and Year 2000. An ongoing series of meetings are now being held with individual users, to coordinate modifications between state agencies, federal agencies and local users.

To summarize, DCJS has:

- completed the program inventory;
- established a plan for remediation;
- commenced program modifications;
- commenced testing of modified programs;
- initiated discussions leading to the acquisition of a test platform;
- initiated discussions with key users regarding interfaces; and
- developed a proposal for COPS funding to address several Year 2000 issues.

We believe that we are making significant progress in our Year 2000 initiative. Thank you for providing DCJS the opportunity to respond to your draft audit report.

Sincerely,



Edward R. Hallman
Executive Deputy Commissioner

cc: Leo P. Carroll

370 Jay Street
Brooklyn, NY 11201-3844
718 242-4321 Te
718 696 2148 Fax

Lawrence G. Reuter
President



August 28, 1997

Mr. David R. Hancox
Audit Director
Office of the State Comptroller
Bureau of Management Audit
A.E. Smith State Office Building
Albany, New York 12236

Dear Mr. Hancox:

This is in response to the New York State Comptroller's Office review of New York's Preparation for the Year 2000.

New York City Transit is pleased that the Draft Audit Report by the Office of the State Comptroller on Year 2000 Preparation has validated that this Agency has taken the proper steps to ensure that all software and hardware will be Year 2000 compliant by the turn of the century. New York City Transit considers the Year 2000 project to be one of the top technological priorities.

However, New York City Transit disagrees with the draft report with regard to the statement that no State Agencies have a completed project plan for Year 2000 conversion. New York City Transit has a project plan for the Year 2000 effort, which includes dedicated resources for this effort. In addition, a project team with the sole task of performing Year 2000 conversion has been formed.

With regard to the draft report's comments on Transit's Mid-Range platform conversion, all Statements of Work and Statements of Deliverables have been completed. The consulting services that will be involved with this project have been selected. In addition, all resources required for this effort have been identified.

With respect to the draft report's comments about conversion of PC platforms, substantial work has been completed for the PC platforms. A dedicated lab for hardware testing has been created. Hardware that is not compliant has been identified, and determinations are being made as to the most economical means of replacement.

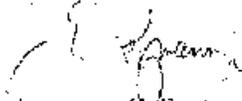
MTA New York City Transit is an agency of the Metropolitan Transportation Authority, State of New York.
E. Virgi Conway, Chairman

Mr. David R. Hancox
Page 2
August 28, 1997

In addition, internal audits are continuing to determine Transit's exposure to PC software that is not compliant. A database of software audits for tracking audit statuses has been created. Internal Transit Departments are notified when software is not compliant, and corrective procedures are developed. In addition, in applicable cases, vendors are contacted for corrective actions for software that is not compliant.

Should you have any questions, or require additional information, please contact Soossan Salmassi at (718) 694-5270.

Sincerely,



Lawrence G. Ruter
President

cc: R. V. Barnes
M. B. Labate



STATE OF NEW YORK
DEPARTMENT OF TAXATION AND FINANCE
W. A. HARRIMAN CAMPUS
ALBANY, NY 12227

KEVIN F. MURRAY
EXECUTIVE DEPUTY COMMISSIONER

September 8, 1997

Mr. David Hancox
Director of State Audits
Office of the State Comptroller
Bureau of Management Audits
A. E. Smith State Office Building
13th floor
Albany, New York 12236-0001

Dear Mr. Hancox:

Thank you for the opportunity to comment on the audit report entitled: "New York's Preparation for the Year 2000 Governor's Task Force on Information Resource Management and Selected State Agencies and Public Authorities (96-S-84)."

We appreciate the audit's positive findings as the Department prepares for the Year 2000. The Department is well aware of our crucial tax collection role. We are pursuing our goal to implement Year 2000 activities in a timely manner in order to provide the State with uninterrupted service. The following was the sole recommendation for the Department.

Recommendation 5:

Continue implementation of Year 2000 project activities.

Response:

The Year 2000 project is the top priority technology project at the Department. It will remain so until all critical systems are compliant.

Since the visit to the Department by your staff, we have continued to make good progress toward our goal.

Sincerely,

Kevin F. Murray
Executive Deputy Commissioner

347 Madison Avenue
New York, NY 10017-3709
212 878-7000 Tel
212 878-7000 Fax

E. Virgil Conway
Chairman



September 22, 1997

Mr. David R. Hancox, Audit Director
Office of the State Comptroller
Bureau of Management Audit
A.F. Smith State Office Building
Albany, New York 12236

**Re: New York's Preparation for the Year 2000 Governor's Task Force on
Information Resource Management and Selected State Agencies and Public
Authorities - #96-S-84**

Dear Mr. Hancox:

This is in reply to your letter requesting a response to the above-captioned draft
audit report.

I have attached for your information the comments of Mr. Lawrence Reuter,
President, New York City Transit, and Mr. Albert Gabbay, CIO and Director, MTA
IST&P, which address your report in detail.

Sincerely,

A handwritten signature in black ink that reads "E. Virgil Conway". The signature is written in a cursive style with a large initial "E".

Attachments

The agencies of the MTA,
State of New York

MTA New York City Transit
MTA Long Island Rail Road

MTA Long Island Bus
MTA Metro-North Railroad

MTA Bridges and Tunnels
MTA Card Company

Memorandum

Metropolitan Transportation Authority



Date: September 15, 1997
To: Nicholas DiMola
From: Albert Gabbay 
Re: Office of the State Comptroller - Report on Year 2000 Initiative

This is in response to the New York State Comptroller's Office review of New York's Preparation for the Year 2000. The draft audit report contains findings regarding both NYC Transit and the MTA. NYC Transit is responding under separate cover; this memo addresses the one comment in the report related to the MTA.

The draft report from the Comptroller's Office notes that MTA information technology units were not aware of the existence of Governor's Task Force on Year 2000 as a resource until IST&P received a Year 2000 survey document. This is correct. Prior to the distribution of this survey, the MTA was not included on the Task Force mailing list. This oversight was corrected immediately, and we now receive Task Force materials on a regular basis.

The MTA and its agencies have been actively working with the Task Force for approximately eight months, and began the MTA Year 2000 effort in February, 1996. These efforts have included participation in Task Force-sponsored workshops and conferences, adoption of procurement procedures tailored to meet the special needs of Year 2000, and implementation of "best practices" identified through the experiences of other state authorities and agencies. It is our intention to continue our participation in the Task Force, and we look forward to a mutually beneficial relationship.

Should you have any questions, or require additional information, please contact me (x7115) or Chuck Conn, IST&P Director-Business Systems Planning who is the MTA Year 2000 Coordinator (x7124).

cc: J. Coulter
S. Reltano
F. Taylor

Figure 13