

8th Quarterly Report

Progress on Year 2000 Conversion



U.S. Office of Management and Budget

Data received February 12, 1999

Issued March 18, 1999

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EXECUTIVE SUMMARY

The Administration is committed to ensuring that Federal agencies meet the challenges posed by the Year 2000 (“Y2K”) computer problem. Since November, the Federal Government has made substantial progress toward fixing the problem. As of February 12, 1999:

- Of the 6,399 mission critical systems, 79 percent are now fully compliant, up from 61 percent in December. These compliant systems include systems that have been repaired or replaced as well as those that were already compliant.
- Of the remaining 1,354 mission critical systems that are not yet compliant, 966 (71 percent) are being repaired, 270 (20 percent) are being replaced, and 118 (9 percent) will be retired.
- Of the 4,130 mission critical systems being repaired, 96 percent have completed renovation, up from 90 percent in the previous report; 87 percent have completed validation, up from 60- percent; and 76 percent have completed implementation and are fully compliant, up from 52 percent.

The Office of Management and Budget (OMB), in cooperation with John Koskinen, Assistant to the President and Chair of the President’s Council on Year 2000 Conversion, continue to work closely with individual agencies. Since December, most agencies have made significant progress toward meeting the Governmentwide goals, although several agencies remain behind. As of February 12, 1999:

- Five agencies (the Environmental Protection Agency, the National Science Foundation, the Nuclear Regulatory Commission, the Small Business Administration, and the Social Security Administration) report that their mission critical systems are now 100 percent compliant.
- Three agencies (the U.S. Agency for International Development, the Department of Health and Human Services, and the Department of Transportation) are not making adequate progress and have been rated in Tier 1.
- Agencies now estimate they will spend \$6.8 billion fixing the problem from Fiscal Year 1996 through Fiscal Year 2000, an increase from the February estimate of \$6.4 billion. This increase is not unexpected, and OMB and the Congress continue to work closely with the agencies to ensure that they have adequate funding through allocations from the supplemental contingent emergency reserve.

While agencies expect that their mission critical systems will be ready by December 31, they are also developing business continuity and contingency plans (BCCPs) to ensure program delivery in the event of a system failure or malfunction, whether within or outside of the agency.

Additionally, for those agencies that are behind schedule, they are emphasizing completion of their remaining mission critical systems.

As agencies complete work on fixing their mission critical systems, they are now focusing on demonstrating that programs and services, especially those critical to public safety, health, and well-being, will be operational. Summary information on the readiness of six key programs (e.g., Unemployment Insurance and Food Stamps) is included in this report. In addition, new guidance from OMB will direct agencies to work with other Federal agencies, State and local governments, the private sector, and others to assure the readiness of 40 high-impact public programs.

**Progress on Year 2000 Conversion
Report of the U.S. Office of Management and Budget
as of February 12, 1999**

I. INTRODUCTION

This report is the eighth in a series of quarterly reports to Congress on the Administration's progress in fixing the year 2000 ("Y2K") computer problem in Federal systems. This report builds on previous reports by updating previous measures of progress and cost including information on Federally supported, State-run programs. This report also provides more information on the efforts that Federal agencies are undertaking on business continuity and contingency planning.

This report summarizes data received on February 12, 1999 from the 24 agencies that make up the Federal Chief Information Officers' (CIO) Council.¹ It also summarizes data from 44 small and independent agencies. The Office of Management and Budget (OMB) will ask all small and independent agencies to report again on their status in May.

The 24 agencies are ranked into Tier 1 (insufficient evidence of adequate progress), Tier 2 (progress, but concerns), or Tier 3 (satisfactory progress). This report provides summary information about the status of the Government's Year 2000 efforts. It also describes the status of Governmentwide activities underway to ensure the readiness of telecommunications, buildings, biomedical devices and laboratory equipment, data exchanges with the States, and various information sharing initiatives.

This report and all previous reports are available on OMB's web site [<http://www.whitehouse.gov/WH/EOP/omb/>], on the web site for the President's Council on Year 2000 Conversion [<http://www.y2k.gov>], or the Federal CIO Council's web site [<http://cio.gov>].²

OMB's initial report on the Y2K problem, entitled "Getting Federal Computers Ready for the Year 2000," was transmitted to Congress on February 6, 1997. The report outlined the Federal Government's strategy to address the Y2K problem in Federal systems; that strategy remains predicated on agency accountability. OMB continues to work closely with the President's Council on Year 2000 Conversion. Specifically, OMB is closely overseeing efforts to assure that Federal programs will operate smoothly, while the Council is coordinating Federal efforts to reach out to and support efforts to address the Year 2000 problem in the private sector, in State and local governments, and internationally.

The next quarterly reports to OMB will focus on the expected completion of work on most systems, while placing particular emphasis on those systems that are not yet fixed. New guidance from OMB is being developed that addresses the need for Federal agencies to work

¹ Except where noted, the summary data provided in this report refer solely to the 24 agencies.

² A list of key Federal year 2000 web sites may be found in Appendix B.

closely with their partners in other Federal agencies, State and local governments, and the private sector, to develop plans to ensure the readiness of such programs. Such plans might include testing data exchanges across partners, developing complementary business continuity and contingency plans, and sharing key information on readiness with other partners and the public.

Specifically, new guidance from OMB will require agencies to take a leadership role and work with their partners in ensuring the readiness of key public services or programs. A total of 40 high- impact programs, particularly those that affect the health, safety or welfare of individuals, have been identified. A lead agency will be tasked to work with other Federal agencies, State and local governments, the private sector, and others as necessary to develop a plan for testing and assuring that the Federal program will work. These agencies will also be asked to publicly demonstrate this before September 30, 1999.

The Administration continues to treat this challenge with the direct, high-level attention it deserves. The additional focus on the year 2000 problem by the President, Congress, and the public has resulted in agencies focusing management attention on the issue and taking a close look at their resource needs. The Year 2000 contingent emergency reserve has helped ensure that agencies have quick access to funds to speed their work.

II. SUMMARY OF OVERALL PROGRESS

SUMMARY OF SYSTEMS' PROGRESS

- Of the 6,399 mission critical systems, 79 percent are now fully compliant, up from 61 percent in February. These compliant systems include systems that have been repaired or replaced as well as those that were already compliant. (See Table 1 and Appendix A, Table 1.)
- Of the remaining 1,354 mission critical systems that are not yet compliant, 966 (71 percent) are being repaired, 270 (20 percent) are being replaced, and 118 (9 percent) will be retired.
- Of the 4,130 mission critical systems being repaired, 96 percent have completed renovation, up from 90 percent in the previous report; 87 percent have completed validation, up from 60 percent; and 76 percent have completed implementation and are fully compliant, up from 52 percent. (See Appendix A, Table 2.)
- Five agencies (the Environmental Protection Agency, the National Science Foundation, the Nuclear Regulatory Commission, the Small Business Administration, and the Social Security Administration) report that their mission critical systems are now 100 percent compliant.
- An additional eight agencies, (the Department of Education, the Federal Emergency Management Agency, the General Services Administration, the Department of Housing and Urban Development, the Department of the Interior, the National Aeronautics and Space Administration, the Office of Personnel Management, and the Department of

Veterans Affairs) report that they are close to completing their work on mission critical systems and are rated in Tier 3. (See Table 1.)

- Three agencies (the U.S. Agency for International Development, the Department of Health and Human Services, and the Department of Transportation) are not making adequate progress and have been rated in Tier 1.
- There are now eight Tier 2 agencies (the U.S. Department of Agriculture, the Department of Commerce, the Department of Defense, the Department of Energy, the Department of Justice, the Department of Labor, the Department of State, and the Department of Treasury) who are making progress, but about which OMB has concerns.
- Governmentwide, domestic telecommunications systems are in good shape. Federal agencies with telecommunications systems overseas are more at risk, but are working hard to ensure that embassies and other overseas posts will have reliable communications.
- Governmentwide, Federal buildings are not at significant risk for the year 2000. Extremely limited Y2K issues have been identified in elevators, and those that have been identified do not affect operational performance.
- The Food and Drug Administration, in cooperation with the Department of Veterans Affairs and the Department of Defense, continues to enhance its database of biomedical and laboratory equipment. The FDA is also developing a hotline and is increasing its inspections of manufacturing facilities.
- The U.S. Government Gateway for Year 2000 Information Directories web site is continuously improving. In January 1999 it was recognized -- again -- by the Dow Jones Business Directory for the quality and wealth of information it provides.

Table 1
Governmentwide Summary -- Year 2000 Status
Mission-Critical Systems

Agency Status	All Systems	Systems Being Repaired			
	Y2K Compliant	Assessment Complete	Renovation Complete	Validation Complete	Implementation Complete
Tier Three NASA, FEMA, Education, OPM, HUD, Interior, GSA, VA, SBA, EPA, NSF, NRC, SSA	96%	100%	100%	99%	96%
Tier Two Agriculture, Commerce, Defense, Energy, Justice, Labor, State, Treasury	77%	100%	94%	83%	74%
Tier One U.S. Agency for International Development, Health and Human Services, Transportation	63%	100%	98%	79%	42%
All Agencies	79 %	100 %	96 %	87 %	76 %

COST SUMMARY

Agencies now estimate they will spend \$6.8 billion fixing the problem from Fiscal Year 1996 through Fiscal Year 2000, an increase from \$6.4 billion in November 1998.³ (See Table A3.) This increase is not unexpected, and the agencies are using the contingent emergency reserve and existing resources to address emerging requirements.

³ These estimates include the costs of identifying necessary changes, evaluating the cost effectiveness of making those changes (fix or scrap decisions), making changes, testing systems, and preparing contingencies for failure recovery. They include the costs for fixing both mission critical and non-mission critical systems, as well as fixing non-information technology products and systems such as air conditioning and heating. They include outreach activities to non-Federal entities. They do not include the costs of upgrades or replacements that would otherwise occur as part of the normal systems life cycle. They also do not include the Federal share of the costs for State information systems that support Federal programs.

- Most of these cost increases are attributable to refinement of estimates as agencies move through the validation phase and find that some systems need to be reworked, develop business continuity and contingency plans, and begin implementing contingency planning for some systems. For example, some increases reflect decisions to repair legacy systems in case those systems cannot be replaced in time. To the extent that agencies encounter additional difficulties through testing, and as decisions to implement contingency plans are made, costs are likely to rise.

SUMMARY OF OTHER PROGRESS

- All agencies are making good progress on their systems containing embedded chips. For the majority of agencies, this area does not appear to be of great concern, as embedded chips are not integral to the delivery of Federal programs. The CIO Council Subcommittee on Buildings has indicated that most buildings will face little or no risk and that work-arounds are available. Those few agencies (e.g., Defense and NASA) that use specialized, mission critical equipment that relies on embedded chips are emphasizing efforts to find and fix any problems.
- All agencies, to varying degrees, are independently verifying and validating their testing results and other progress on their systems. Governmentwide, 87 percent of the mission critical systems being repaired have been validated as Year 2000 compliant.
- The Federal Government continues to make progress in fixing data exchanges. In particular, 65 percent of data exchanges with State governments are now compliant.
- All agencies have identified their high-level core business processes and begun work on business continuity and contingency plans (BCCPs). While some agencies are still in the beginning stages of developing their BCCPs, a number of agencies are well along in their work.

III. GOVERNMENTWIDE ISSUES

GOVERNMENTWIDE INITIATIVES

Telecommunications Systems

GSA manages contracts under which telecommunications equipment and services are acquired for other Government agencies.. GSA owns equipment that provides local telecommunication services to Federal agencies at consolidated locations throughout the United States. Also, GSA acquires telecommunications services and resells those services to other agencies. Like the private sector, Federal agencies are reliant upon commercial vendors and the information they supply regarding Year 2000 (Y2K) compliance of their telecommunications systems. In most cases, agencies must work with the telecommunications vendors to acquire the system upgrades necessary for Y2K compliance. Although the release of compliance information by industry has improved, some vendors are still reluctant to share information about

the compliance status of their products and services.

The Telecommunications Subcommittee of the CIO Committee on Y2K is chaired by GSA's Federal Technology Service (FTS). The Subcommittee is working with industry to ensure that the telecommunications services and systems provided to the Federal Government are Y2K compliant. FTS has completed its inventory and assessment for all GSA Consolidated Systems, which provide local telecommunications services (including hardware, licensed proprietary software, and features such as voice mail) to Federal agencies nationwide. All but six systems have been renovated, and those are scheduled for completion by March 31, 1999.

The Subcommittee has formed interagency Special Interest Groups (SIGs) to pursue the testing of telecommunications equipment on a collaborative basis with industry. These tests focus on Customer Premise Equipment, and the test results are shared across the Government. The SIGs are also taking a lead in addressing commonly acquired telecommunications services such as wireless and internet access. A web site, <http://y2k.fts.gsa.gov>, lists the compliance status of telecommunications equipment and has links to some sixty Y2K industry sites. Equipment testing began in December of 1997, and the testing of major elements is complete. Additional tests will occur throughout 1999 as deemed necessary to further reduce the risk of failure.

The Federal Government is participating in network interoperability testing of certain critical systems scheduled by industry for early 1999. GSA has contacted the Local Exchange Carriers (LECs) regarding their Y2K status. Responses indicate that the LECs will complete equipment modifications and testing for Y2K compliance by mid-1999. At the end of 1998, the LECs reported that they were 76 percent complete.

In the Washington Metropolitan Area, the Washington Interagency Telecommunications Systems (WITS) provides approximately 170,000 analog and digital lines supporting both data and voice applications to Federal agencies. The system was made Y2K compliant in July 1998.

FTS 2000

Through the Government's FTS 2000 contract, GSA is responsible for ensuring Y2K compliance for Federal Government long distance telecommunications. GSA intends to transition to FTS 2001 contracts wherever possible before the onset of the year 2000 to ensure compliance and a smooth transition. Where the transition to FTS 2001 has not been completed by January 1, 2000, GSA has a contingency plan to use Sprint and AT&T FTS 2000 services. Both companies have made formal commitments that their systems will be Y2K compliant by mid-1999.

International Telecommunications

Within the United States, the International Direct Distance Dialing contract with AT&T that is managed by GSA/FTS has been certified compliant. However, Federal agencies that have extensive foreign operations are increasingly concerned about the effect that Y2K may have on their ability to communicate with offices located in foreign nations. Some locations may be

totally dependent upon the telecommunications infrastructures of the host nations. The State Department has determined that more than 95 percent of the telecommunications equipment it operates overseas is compliant or can be operated in a manual mode. In addition, the State Department's Diplomatic Telecommunications Services Program Office (DTS-PO) expects to provide bandwidth at either current levels, or levels sufficient to support most business operations, at embassies and posts overseas. DTS-PO has determined that 60 of the 66 mission critical components that support its operations are compliant with the remaining six items to be compliant by March 31, 1999.

However, roughly five percent of the State Department's telecommunications needs are met by equipment that is operated by host nations. In many cases, links between State Department locations and other U.S. Government offices overseas rely on host nation services. This reliance on foreign networks has led several agencies, including the Peace Corps and the Agency for International Development, to anticipate that operations in some countries, particularly in more remote locations, may be adversely affected by telecommunications problems. In these instances, international agencies are working together to develop contingency plans or to identify backup systems, such as satellites, to ensure communications are maintained. Their efforts have been slowed by the lack of information regarding the Y2K compliance status of alternative communications services, including new satellite-based mobile communications systems.

Other Government-wide Telecommunications Services

The equipment supplied by GSA under the Federal Wireless Telecommunications Service has been certified compliant by GTE. GSA-maintained, Governmentwide contracts for Wire and Cable Service; Electronic Commerce, Internet, and E-Mail Access; and Technical and Management Support all contain Y2K compliance clauses. All task orders for the Telecommunications Support Contract 2, which provides consulting and telecommunications services, include Y2K compliance clauses.

Buildings Systems

Many products or systems in buildings, such as those that control or interact with security systems, elevators, or heating and air conditioning systems, contain embedded chips. These chips can include a date function that helps run the system -- for example, to time maintenance procedures or to regulate temperature. If this date function is not Y2K compliant, then the chip may not work. This problem is particularly complex, because chip manufacturers do not closely track how these chips are programmed and used. In addition, a manufacturer of equipment (such as a security system) is unlikely to know the compliance status of the particular chips used. It may also be difficult to accurately test the compliance of these chips in a working environment. Once non-compliant chips are identified, they must be replaced.

GSA, through its Public Buildings Service, has been the Federal Government's leader in

addressing the Y2K issue in buildings. For example, GSA chairs the Year 2000 Buildings Subcommittee of the CIO Council's Year 2000 Committee.

GSA is making many of the Subcommittee's findings publicly available. First, GSA has established a public web site (http://globe.lmi.org/lmi_pbs/y2kproducts/) that provides Y2K information for building systems. There are now over 10,000 products listed on this site and approximately three percent of all products are identified as non-compliant. Another web site has been established which allows personnel from Federal agencies to determine the Y2K compliance status of Federally owned and leased facilities. This site is for Federal Government use only.

Findings to date suggest that elevators in Federal buildings are not a significant risk. Year 2000 issues identified with elevators are limited to monitoring functions only and do not affect operational performance. For the most part, problems to date have been found within energy management control systems and security systems.

However, even if any problems do arise, it is expected that Federal buildings will remain operational. No catastrophic Y2K building system potential failures have been identified. Furthermore, if any should occur, nearly all such systems allow for manual override capabilities for security, air, heating, and energy management systems. As a result, should any Y2K problems arise in building systems, GSA expects that this will impose a greater workload on building managers and on the individuals who maintain the building systems, but that any problems will remain largely invisible to building occupants.

The Year 2000 Buildings Subcommittee of the CIO Council continues to meet every month and to exchange relevant information across the Federal Government. While continuing to ensure that products and systems that contain embedded chips are compliant, the focus for the remainder of the year will be on testing and contingency planning. Additionally, a Governmentwide contingency plan for buildings is under development to prepare for unexpected system failures and utility outages. The Committee is working with all Federal agencies, whether they work in GSA owned or managed space, space that is leased by GSA, or space that is owned or managed directly by the agencies.

Biomedical and Laboratory Equipment

The Biomedical and Laboratory Equipment Subcommittee of the CIO Council's Year 2000 Committee has recently improved the biomedical equipment clearinghouse database. Although the database is operated by FDA, it has received strong support, both financially and as providers of data, from the Department of Veterans Affairs⁴ and from the Department of

⁴ As a customer rather than a regulator, VA has received responses on the compliance of biomedical equipment from 97 percent of manufacturers contacted. VA has shared all of the information they it has collected with the FDA.

Defense. This site provides users with comprehensive and up-to-date information on products that may have Y2K compliance problems in order to help protect patient health and safety.

Working with the Health Industries Manufacturing Association, FDA has contacted each Y2K-vulnerable manufacturer with the goal of convincing those who have not yet reported to the clearinghouse to do so. To better meet the need for detailed information requested by biomedical equipment users, Y2K vulnerable manufacturers will be asked to provide more detailed identification of non-compliant products. They will also be asked to provide more detailed descriptions of how products will operate as a result of any uncorrected date problems, and to explain explicitly whether the proposed solutions will be implemented by the manufacturer or the owner.

FDA has identified approximately 1900 manufacturers that produce devices that rely on electronic circuitry. Whether or not these devices are date sensitive, FDA has identified these manufacturers as Y2K vulnerable. These manufacturers produce an unknown number of different devices. Of these, 350 manufacturers have indicated that they have at least one device with a Y2K problem.

VA, in its role as a customer, requested Y2K compliance information from manufacturers of devices used in VHA hospitals. The results from VA's queries are shown in the table below. Of all the products and devices whose compliance information has been reported to VA, there have been only two instances in which a device was found to have a Y2K problem that could potentially result in injury to a patient.

Table 2 -- Manufacturer Compliance Data

Biomedical Equipment Y2K Status	Percentage of manufacturers
Equipment is Y2K Compliant.	55 %
Equipment is not Y2K compliant and is no longer supported by the manufacturer.	8 %
Equipment is not currently Y2K compliant, but the manufacturer has stated that it intends to repair or otherwise fix the device.	10 %
Equipment is still being assessed by the manufacturer.	3 %
Manufacturer has gone out of business.	14 %
Inquiries were returned to VA marked "Return to sender."	8 %
Manufacturer has not responded despite multiple inquiries.	2 %

In addition, the FDA issued an "early alert" on the potential problems associated with date stamping in certain defibrillators and patient monitors that could occur in 1999. The FDA is also taking the following steps during the coming months:

- Asking manufacturers to furnish lists of specific product models that are Y2K compliant for posting to the web site. The FDA web site provides links to the web sites of 332 manufacturers.
- Providing a manufacturer point of contact for test information.
- Facilitating the identification of the source of some products that would otherwise be difficult to locate as a result of mergers and acquisitions by their companies.
- Developing and staffing a telephone hotline.
- Increasing its inspections of manufacturing facilities in order to ensure that manufacturing processes will be uninterrupted by the Y2K problem.
- Monitoring reports of Y2K problems with an emphasis on devices that could present significant risk to patients. FDA will investigate and take action where warranted. Where appropriate, FDA plans to require recall of devices which present an unreasonable risk of substantial harm to the public health. FDA continues to issue early alerts on at-risk systems as they discover them.

Other Information Sharing Initiatives

U.S. Federal Government Gateway for Year 2000 Information Directories

The U.S. Federal Government Gateway for Year 2000 Information Directories web site, [<http://www.itpolicy.gsa.gov>, then click on the year 2000 icon], is managed and maintained by GSA on behalf of the CIO Council. It is intended to assist Federal agencies in addressing the Year 2000 problems and is routinely updated and enhanced to provide timely information. The web site was recognized in June 1998 and again in January 1999 by the Dow Jones Business Directory for the quality and wealth of information it provides. The site also provides links to various organizations' Y2K readiness disclosures and compliance statements that are being published in response to the recently enacted Y2K Information and Readiness Disclosure Act. A "Frequently Asked Questions" section was recently added using some of the most commonly asked questions that have been received to date. Finally, the site contains several links to other important Year 2000 sites, including the President's Council on Year 2000 Conversion, the CIO Council Information Directory on Y2K, an International Directory containing links to other countries' sites, and an ongoing international virtual conference on Y2K.

Database of Compliant COTS Products

The Commercial, Off-the-Shelf (COTS) Products database, managed and maintained by GSA, is continuously updated with Y2K compliant product information. The average number of hits to the database is 16,000 per week. It includes information from 780 vendors and 95 Federal

agencies on 2,375 products. A total of 21 agencies have provided test data to the database, located at <http://y2k.policyworks.gov>.

VALIDATION AND VERIFICATION EFFORTS

Governmentwide, 87 percent of mission critical systems have been validated. Validation involves multiple phases of testing, including a combination of testing of individual components (unit testing), testing of entire systems (integration or systems testing), and in some cases, testing of a string of interdependent systems (end-to-end testing). In addition, all agencies are required to independently verify and validate testing results. Senior management the agencies are now relying on independent verification to provide a double-check that their mission critical systems will, in fact, be ready. All large agencies are relying on a combination of their Inspectors General, contractors, and, in some cases, independent experts from other agencies to verify agencies' testing results. Some agencies (e.g. NASA and the Department of Transportation) are applying more rigorous testing protocols to those systems that could have a direct impact on safety. While such rigorous testing slows progress, it nevertheless provides a higher degree of assurance that such systems will not fail.

BUSINESS CONTINUITY AND CONTINGENCY PLANNING

To provide greater assurance that agencies will be able to deliver programs and services, agencies are developing Businesses Continuity and Contingency Plans (BCCPs). BCCPs describe risk mitigation strategies and work-around alternatives to ensure the continuity of the agency's core business functions, especially those functions that have the most immediate and direct affect on the public. Such functions rely not only on the agency's internal systems, but also on services outside of the agency's control, such as the ability of suppliers to provide products, services, or data, or the loss of critical infrastructure.

All agencies are using as a guide GAO's report, "Year 2000 Computing Crisis: Business Continuity and Contingency Planning."⁵ Within this guidance, agencies have taken somewhat varied approaches depending on the size, the mission, and the organization of the agency. For example, some agencies described both higher-level core business processes as well as specific core functions that they support. Agency plans include taking steps to ensure that back-up resources are available, determining if paper processes will work, and making sure that regional offices can operate independently of headquarters, if necessary.

Each agency has also developed key milestones for development and implementation of their plans, including testing. Also, agencies are ensuring that field offices develop their own

⁵ See GAO report, a shared effort with the Year 2000 Committee of the CIO Council, "Year 2000 Computing Crisis: Business Continuity and Contingency Planning." July, 1998; GAO/AIMD-10.1.19. In addition, model BCCPs, including that of the Social Security Administration, were shared with other agencies as models.

plans.

COSTS AND FUNDING

Agencies now estimate they will spend \$6.8 billion fixing the problem from Fiscal Year 1996 through Fiscal Year 2000. (See Table A3.) Of this, \$433.2 million has been specifically requested in the President's FY 2000 budget. The FY 2000 costs are primarily for Y2K project offices to manage and monitor the transition into 2000 and undertake the completion of final contingency planning. The increase from \$6.4 billion in the November report can be attributed to several factors:

- Refinement of estimates as agencies move through the validation phase and decide to increase testing and independent verification activities.
- Discovery that some systems need more work during independent validation.
- Obtaining more information about the costs of fixing the embedded chip problem.
- Development of continuity of business plans.
- Decisions to repair legacy systems in case those systems are not replaced on time.

To the extent that agencies encounter additional requirements, these estimates will continue to rise.

In order to address unanticipated costs associated with Y2K, the Omnibus Consolidated and Emergency Supplemental Appropriations Act for Fiscal Year 1999 (P.L. 105-277) includes contingent emergency funding for Y2K computer conversion activities: \$2.25 billion for non-defense activities and \$1.1 billion for defense-related activities. P.L. 105-277 makes the Director of the Office of Management and Budget responsible for allocating non-defense funding and makes the Secretary of Defense responsible for allocating defense-related funds. (See Appendix A, Table 4 for detail on contingent emergency funding allocated to date.)

In order to determine how to best allocate all available non-defense funding for Y2K -- both base appropriations and emergency funding -- OMB has worked with agencies to evaluate Y2K requirements. First, OMB made certain that agencies received funding for activities that were requested in the President's Fiscal Year 1999 Budget, but that Congress directed be funded from the Y2K contingent emergency reserve. These activities totaled approximately \$590 million. Additionally, OMB has approved the release of approximately \$970 million in emergency funding for unforeseen requirements that can not be accommodated within agencies' FY 1999 appropriated levels. In total, \$690 million remains available for non-defense agencies to address emerging requirements.

To date, the Department of Defense has allocated \$935 million of the \$1.1 billion made available for defense-related activities. Fifteen percent, or \$135 million, of Defense's fund remains in reserve for contingent needs.

Additional transfers from the contingent emergency reserve will be made in the future to ensure that all agencies have sufficient resources to achieve Y2K compliance and complete contingency planning. OMB has notified agencies that, as they identify unforeseen funding requirements, they should forward these requirements to OMB for evaluation. As we expect that unforeseen requirements will continue to arise, the Administration is concerned about attempts to rescind contingent emergency funding for Y2K at a time when it is most critically needed. With the Congress scheduled to be out of session for the months preceding December 31, 1999, the Administration does not believe that eliminating over fifteen percent of the remaining contingent Y2K fund gives flexibility for responding to unanticipated needs.

WORK WITH THE STATES

Data Exchanges

The Federal Government sends and receives data from hundreds of different partners in support of a myriad of programs. In order to work properly, the data exchanges that enable partners to communicate with each other must be fixed on both sides. Probably the single most important partnership is with the States. Without functional data exchanges, important Federal and/or State programs will not work.

The Federal CIO Council, in cooperation with the National Association of State Information Resource Executives (NASIRE), first agreed at a summit in October 1997 to make the issue of fixing data exchanges a top priority. To assist in the coordination of data exchange activities between Federal agencies and the States, the CIO Council developed a Federal/State Data Exchange Database, managed by GSA, which contains the status of exchanges from both the Federal and State perspectives. The Federal Government has provided information to the database on all of its data exchanges with the States, including a point of contact, phone number, and the status of the Federal Government's work on the exchange. At this time, Federal agencies report that 65 percent of Federal/State data exchanges are compliant.

The Federal/State Data Exchange Database provides information for Federal and State agencies to facilitate the process of resolving data exchange compliance issues and to highlight areas where additional work may be needed. In many cases, the Federal agencies are dependent upon State actions to resolve compliance issues. OMB will continue to promote use of the database by both Federal agencies and State organizations as a resource for resolving data exchange anomalies and monitoring overall compliance progress.

While almost all of the States are actively working on their side of the data exchanges and

are making excellent progress, a few States and territories are still not participating in the database. Accordingly, their progress is completely unknown. As of February 19, 1999, 48 States and the District of Columbia have requested and received passwords to the database. Two States, Illinois and Oklahoma, and six territories have not.

To date, seven Federal agencies have achieved Y2K compliance for 100 percent of their data exchanges. These agencies are Commerce, the General Services Administration, Housing and Urban Development, the Nuclear Regulatory Commission, the National Science Foundation, the Office of Personnel Management, and the Social Security Administration.

An additional eight agencies have achieved Year 2000 compliance for more than 50 percent of their State data exchanges. These agencies are Agriculture, Defense, Energy, the Environmental Protection Agency, Health and Human Services, Interior, Labor, and Transportation. Those agencies with less than 50 percent of their State data exchanges compliant are the Agency for International Development, Education, the Federal Emergency Management Agency, NASA, Treasury, the U.S. Postal Service, and Justice. As noted above, some of these agencies are awaiting State action in order to proceed further.

Status of Key, Federally Supported, State-run Programs

Building on the database initiative, on January 26, 1999, OMB issued revised reporting guidance to the Federal agencies, asking all Federal agencies to take an even stronger leadership role and work with their partners to ensure the readiness of Federally-supported, State-run programs, including those programs run by Territories and the District of Columbia. In particular, Federal agencies were asked to provide specific information on the following ten programs: Food Stamps; Unemployment Insurance (UI); Temporary Assistance for Needy Families (TANF); Medical Assistance Program; Child Nutrition Programs; Child Support Enforcement Programs; Special Supplemental Nutrition Program for Women, Infants and Children (WIC); Low Income Home Energy Assistance Program (LIHEAP); Child Care Program; and Child Welfare Program. Summary tables of readiness by program and a description of each program are at Appendix B. Not all agencies have provided status information as yet.

**Table 3 -- State Readiness for
Key, Federally Supported Programs**

USDA, HHS, and the Department of Labor asked the 50 States and the District of Columbia for information on the readiness of their systems that administer the Federal programs identified below. The following information consists of information provided by each State and the District of Columbia on when they expect their systems to be ready to support Federal programs. Numbers refer to States.

Program	Compliant	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	No Report
Food Stamps	15	10	12	8	5	0
Unemployment Insurance	21	6	13	8	1	1
TANF	7	3	12	4	2	22
Medical Assistance Program	See Table 3					
Child Nutrition						51
Child Support	4	6	10	3	2	25
Child Care	4	3	8	5	2	31
Child Welfare	6	3	8	5	2	27
WIC	24	8	6	6	6	0
LIHEAP						51

The Department of Health and Human Services states that it is still collecting information from the States on the status of the LIHEAP program. The United States Department of Agriculture states that it is still collecting information from the States on the status of the Child Nutrition Program.

The Department of Health and Human Services provided readiness information on the following two, State-level Medicaid systems operated under the Medical Assistance Program. This information is for the 50 States and the District of Columbia.

**Table 4 -- State Readiness for the
Medical Assistance Program (Medicaid)**

System	No. Compliant	99:1st Q	99: 2nd Q	99: 3rd Q	99: 4th Q	No Report
Integrated Eligibility Systems	3	1	8	5	1	33
Management Information Systems	7	7	14	12	2	9

IV. AGENCY SPECIFIC PROGRESS

OMB evaluates the progress of Federal agencies and groups them into one of three tiers. Tier One comprises agencies where there is insufficient evidence of adequate progress. For agencies in Tier Two, there is evidence of progress, but also concerns. Agencies in Tier Three are those demonstrating satisfactory progress.

PROCESS OF AGENCY EVALUATION

OMB's evaluation involves a review of all elements of progress and of overall status. However, for this report, OMB placed special emphasis on progress since the last report, as well as on other indicators of senior management commitment. OMB also evaluated agencies based on their use of independent verification and evaluation, their progress on business continuity and contingency planning, and their progress on ensuring that Federally-supported, State-run programs, where applicable, will be ready. In evaluating agency progress, OMB used the following criteria:

- Progress & Overall Improvement. Is the agency on schedule for meeting the Governmentwide goals? Has the agency shown improvement in the most recent quarter? Is the agency addressing all facets of the problem? Is it likely that the agency will be compliant by January 1, 2000?
- Independent Verification and Validation (IV&V). Is there a rigorous process by which mission critical systems are identified as Y2K compliant? Is the agency using IV&V to assure that its mission critical systems will work?
- Business Continuity and Contingency Plans (BCCP). Has the agency identified all of its

core business functions? Has the agency provided reasonable master schedule with key milestones for development and testing of the BCCP? Is the agency using reasonable measures of progress in the development and implementation of its local BCCPs? Does it appear that the agency is making adequate progress in developing its BCCP?

Federally-supported, State-run Programs. Is the agency exercising oversight of and making judgements about its State-run programs? Has the agency set priorities (e.g. programs that will have a direct and immediate affect on the health, safety, or well-being of individuals)?

TIER ONE AGENCIES

There are now three agencies in Tier One: the U.S. Agency for International Development (USAID), the Department of Health and Human Services (HHS), and the Department of Transportation (DOT). Since the previous report, three agencies moved from Tier One into Tier Two: the Department of Defense, the Department of Energy, and the Department of State.

U.S. Agency for International Development

USAID is making appreciable progress towards making its seven mission critical systems Y2K compliant. USAID received funding from the Y2K contingency reserve that is being used to accelerate systems renovation. Unfortunately, USAID's Y2K remediation efforts were slowed when testing identified additional Y2K issues in a system previously considered to be compliant. While a setback, the fact that the testing identified an unexpected date-dependency is encouraging as it provides stronger confidence in overall compliance. USAID has completed repair of this system and has taken aggressive steps to address any management or systems issues that may have caused this dependency to remain undetected until testing. USAID expects to test and implement the repaired system by May 15th.

Of the six remaining mission critical systems, USAID has now completed renovation of three; two are undergoing validation, and the third is being implemented. Renovation of USAID's most important system, the New Management System, is underway, with implementation expected to be completed in July 1999. Progress continues on replacing the two systems that USAID has decided not to renovate.

USAID used the setback to review its overall management tools and practices. While their examination validated the overall Y2K project management approach, USAID has taken steps to integrate systems-wide testing into its validation program as early as possible. USAID also aligned all of its information systems activities under a single contractor -- which should improve communications among the various teams working on Y2K repairs. USAID obtained an IV&V contractor to supplement its internal quality review and validation efforts. Senior management continue to play a lead role both in increasing agency-wide awareness of the Y2K problem and reviewing the agency's progress on its internal efforts.

USAID began its continuity of business planning process in August, focusing on backup processes and procedures associated with its mission critical financial management systems. In

recent months, USAID's planning focus has broadened to issues related to host nation infrastructure and safety ensuring continuity of its overseas missions. USAID has performed field assessments in approximately 50 countries. In specific nations, USAID is also identifying critical functions that must be supported and assessing the need for related contingency plans given the nature and level of Y2K risk. The Agency is actively engaged in Year 2000 outreach and awareness training in those nations in which it operates, providing targeted assistance to host nations and other international aid organizations operating in these countries. The next months will be critical as USAID faces many challenges in repairing its mission critical and non-mission critical systems.

Department of Health and Human Services

The Department's Health Care Financing Administration (HCFA) has made significant progress on renovating its internal and external systems. Departmentwide, the Assistant Secretary for Management and Budget is briefed weekly on all aspects of Y2K progress, while the Deputy Secretary has bi-weekly Y2K status meetings.

The Y2K management structure at HCFA is well positioned to ensure that all mission-critical systems will be Y2K compliant before the new millennium. However, HCFA remains a serious concern due to external system testing, validation, and implementation schedules, and high contingency cost estimates. Medicare contractors have been making an intensive, sustained effort to complete validation and implementation of their mission critical systems by the Governmentwide goal of March 31, 1999. However, some external contractors may not succeed in achieving implementation by that deadline. In addition, the qualified compliance of a number of external mission critical systems poses additional challenges for HCFA's management.

As of the reporting period ending January 31, 1999, HCFA has achieved 100 percent compliance for its internal systems, and qualified compliance for 54 of its external systems (69 percent). The qualified status of compliance is based on HCFA's analyses of the self-certification provided by each external system maintainer. HCFA's IV&V contractor agreed with this determination. HCFA's IV&V contractor also reviewed these statements to assess work that remains to achieve full readiness for January 1, 2000. They found 17 systems were Y2K compliant with minor qualifications. The remaining 37 systems reported as compliant had qualifications indicating the need for additional work with the expectation that all 37 systems will be fully Y2K compliant by March 31, 1999. For Medicare external contractor systems, HCFA is working to resolve all outstanding qualifications of contractor self-certification and is requiring recertification of Y2K compliance without qualification after the final code modification this summer.

Other HHS operating divisions have also achieved significant progress. As of the reporting period ending January 31, 1999, 86 percent of HHS critical systems are Y2K compliant. One hundred percent of HHS mission critical systems have completed the renovation phase. HHS has completed the validation and implementation phases on 81 and 79 percent of their mission critical systems, respectively. The remainder of systems requiring validation and

implementation are at FDA, IHS, CDC, PSC, and NIH.

OMB has also learned that HHS' Payment Management System (PMS) will not achieve Y2K compliance within the Governmentwide deadline. HHS anticipates achieving compliance for PMS in June, 1999. The PMS provides centralized electronic funding and cash management service to all organizations receiving HHS grants, including all 50 States. The PMS supports organizations funded by ten other Federal agencies and 42 different subagencies. In FY 1998 the system made 260,000 payments totaling \$165 billion to 20,000 grantees. The level of concern for PMS is based on the findings of an independent study that indicates the existing legacy PMS could be certified Y2K compliant by June 1999, based upon redeployment of available resources. HHS is aware of this issue, and has taken appropriate remediation action. HHS now expects to have a re-engineered PMS, which will be used to replace the legacy PMS, tested and available for implementation before the end of 1999.

As reported last quarter, HCFA has acquired an expert contractor to assist in planning and conducting reviews of State Medicaid Y2K readiness activities. HCFA issued a letter in December 1998 to all State Medicaid Directors informing them of HCFA's systems review plans. States were advised to expect a minimum of two site visits per State in calendar year 1999 to verify their progress and status; to expect that HCFA will provide technical assistance documents; and that HCFA will be conducting regional meetings and workshops on Y2K contingency planning and other activities. All 50 States will be visited by the contractor by April 30, 1999.

HHS operating divisions have developed business continuity and contingency plans for their various business functions, many of which are cross-cutting in nature, such as clinical care and health data, facilities operations, and grants payments. The operating divisions continue to refine their BCCPs. Each operating division has identified its core business functions. Some of the operating divisions have determined that their core business functions do not have an immediate effect upon public health, safety, or financial integrity and have ranked those business functions to have a lower priority for the development of business continuity and contingency plans.

HCFA is well underway in developing contingency plans in case some mission critical systems fail in 2000. HCFA has completed two initial draft plans and will have its BCCP completed in April of 1999. External system contractors could also leave the Medicare program as late as June 1999, which would leave HCFA in the difficult position of having to transfer workload to another contractor with little margin for error to deal with unforeseen and unanticipated problems. Given HCFA's lack of competitive contracting flexibility, the Administration strongly urges Congress to pass contracting reform legislation, which was transmitted on May 1998, as soon as possible to ensure that HCFA is able to contract with any qualified entity in the case of a claims processing system failure.

Department wide assessment continues for embedded systems and facilities. The bulk of the embedded systems requiring assessment are at IHS, where only 3,969 out of 12,966 have

been assessed. The bulk of facilities requiring assessment are at NIH and IHS with 272 and 760 facilities respectively. Assessment work on telecommunications and information technology infrastructure continues at the FDA, CDC, HCFA, IHS, and PSC.

Data exchanges remain a continuing source of work. HHS has a total of 264,186 data exchange interfaces, with HCFA accounting for 99 percent of them, mostly handled by Medicare contractors. Three operating divisions, ACF, CDC, and FDA, report 100 percent of their external data exchanges are compliant. HHS has a total of 1,126 State interfaces. Of those, 863, or 77 percent, are compliant. HCFA accounts for the majority of State interfaces that are not yet compliant. Approximately 50 percent of HCFA's State interfaces are currently compliant.

Department of Transportation

The Department of Transportation's continued management oversight, combined with a dramatically accelerating rate at which the Federal Aviation Administration (FAA) is validating air traffic control system components, is significantly mitigating risk. As of mid-February 1999, the Departmentwide percentage of mission critical systems renovated was 98 percent. The number of mission critical systems validated stood at 79 percent, a very significant improvement over the 31 percent reported validated in the previous quarter. However, with only 24 percent of its mission critical systems implemented, up from 21 percent in the previous quarter, the Department continues to lag well behind the Governmentwide average. The Department's outreach and involvement in all the domestic and international transportation sectors has been exemplary.

The FAA's improvement is dramatic, with 100 percent of its systems renovated, and with 74 percent validated, up from 20 percent in the last quarter. However, its 15 percent implementation rate, which more than doubled from 7 percent last quarter, likewise needs to accelerate. The FAA expects this to occur during the next reporting period. In addition, the FAA has initiated a comprehensive end-to-end testing program and to date has encountered no Year 2000 problems. However, external delays in two primary areas, telecommunications and vendor supplied off-the-shelf software, may delay the completion of validation and final testing. The FAA has paid serious attention to the Host computer system and other critical air traffic control systems, and its aggressive replacement schedule is holding. It has a good independent verification and validation strategy, including significant involvement by the Inspector General's office; it is moving forward on business continuity and contingency planning, including the development of local plans; and contingency plans for specific systems are in place. Notwithstanding this improvement, and given the relatively large number of systems which are still not expected to be implemented until after March, 1999, the FAA needs to ensure that there is no slippage in its implementation schedule.

The U.S. Coast Guard's improved management and operational attention to Year 2000 issues has also minimized risk, but its efforts have uncovered more challenges over time. While its validation rate jumped to 77 percent from the 12 percent reported last quarter, its renovation rate (92 percent) and its implementation rate (3 percent) continue to lag behind the rest of the Department. The particularly important Long Range Aid to Navigation (LORAN) system has, however, completed renovation and validation. While significant challenges remain, the Coast Guard continues to be well positioned to ensure continuity of its safety-related systems and has

good contingency plans, although an increasing number of systems continue to fall behind schedule. As with the FAA, the Coast Guard needs to make a concerted effort to ensure that there is no slippage in its implementation schedule. The Department's other operating administrations continue to be on track to a smooth millennial transition.

TIER TWO AGENCIES

For agencies in Tier Two, OMB sees evidence of progress, but also has concerns. The eight agencies in Tier Two are the Departments of Agriculture, Commerce, Defense, Energy, Justice, Labor, State, and Treasury. Since the previous report, two agencies moved from Tier Two to Tier Three: the Department of Education and the Office of Personnel Management. Three agencies, the Departments of Defense, Energy, and State, moved from Tier One to Tier Two.

Table 5
Tier 2 Agencies -- Progress, But Concerns

Agency	Progress	Concerns
Agriculture	There is good progress in developing contingency plans for systems that are scheduled to be implemented after the March deadline. There is a good structure in place for developing and testing business continuity and contingency plans.	APHIS and the Forest Service must continue to improve validation and implementation efforts. The large number of data exchanges continues to be a concern.
Commerce	From last quarter's report, the percentage of compliant systems has increased from 80 to 86%. For number of systems under repairs, the Department has improved in all three phases. The new CIO is providing leadership on the year 2000 issue and is undertaking IV&V and contingency planning. PTO has prepared a contingency plan for the classified Search and Image Retrieval System which is behind schedule for March implementation. NOAA has implemented and conducted IV&V for its mission critical systems.	Renovations remain incomplete. Five of the 11 NTIS mission critical systems have not been renovated as of February's quarterly report. PTO still has three systems (out of a total of 14) to repair. Out of NOAA's 29 systems, two are expected to miss the March implementation deadline -- the Wind Profiler System and the National Center of Environmental Prediction's contingency supercomputer.
Defense	The actions taken by the Secretary and Deputy Secretary to accelerate the Department's work have resulted in remarkable progress in its efforts to address the year 2000 problem. Since November, the Department has accelerated the work on its mission critical systems, and DOD now reports that 72% of those systems are compliant, an increase from 53% reported in November.	The Department still has a substantial amount of work to be accomplished in a very short time and remains behind the Governmentwide goals for repair of its mission critical systems.
Energy	The Department has made a significant leap in progress in the last quarter by increasing compliance from 50 to 85 % for mission critical systems. This increase was due, in	The Department notes in this quarter's report that they will not have 100 percent of their mission critical systems Y2K compliant by March. Since the last quarterly report, DOE

Agency	Progress	Concerns
	part, to creative implementation of "stretch targets" by the Secretary. The Department has finished renovation on 99% of its mission critical systems. The Department has also completed validation and implementation on 92% and 88% of its mission critical systems, respectively.	added another system to its list of those which will not meet the March deadline, bringing that total to eight systems. Half of these are human resource-related, but the other four are operating systems at the Savannah River Site, including three involved with nuclear materials processing, which need to be closely monitored
Department of Justice	Justice made significant and accelerated progress on renovation and implementation during this quarter. 86% of the Department's mission critical systems are now compliant -- an increase of 32%. Only 31 systems remain to be replaced or remediated. The Department continues its active outreach programs to State and local law enforcement authorities.	The Department reports that 11 (5%) mission critical systems will not meet the March 31, 1999, Governmentwide implementation goal. Several of these lack contingency plans. DOJ has identified an additional 16 systems (7%) that will meet the March 31 goal but that are behind internal Department milestones. Several of these lack contingency plans. Additionally, INS has identified the need to make upgrades to its local area networks that will not be complete until July. Justice should take aggressive action to identify, remediate, and test remaining data exchanges, especially for components other than the FBI. Finally, DOJ needs to accelerate contingency and continuity of business planning.
Department of Labor	Good progress on renovation of mission critical systems. The Department increased the number of compliant mission-critical systems from 67% in the November quarterly report to 85% in this quarter's report. DOL has completed the renovation phase.	The system that produces the Consumer Price Index is scheduled to complete IV&V in mid-May. Only 24% of the Department's exchanges with other Federal entities are currently compliant. However, the majority of these exchanges will be ready for testing once the mission critical systems they support are compliant in March 1999.
State	Of State's 59 mission critical systems, 36 are now compliant and implemented. An additional 12 are now compliant and being deployed worldwide, while six are in testing. State's focus is now turning to contingency and continuity of business planning to ensure the readiness of the strategic and national security needs of the United States. State has made good progress in replacing and modernizing its worldwide, internal information and telecommunications infrastructure. This is particularly important, because State is the major provider of telecommunications services to U.S. Government agencies operating overseas.	State plans on completing implementation of 16 systems in March. The 4 mission critical systems remaining after March 31 will be implemented by August. Although State has conducted a good assessment of a complex Y2K situation, particularly embedded systems, and is asserting a leadership role in providing support to U.S. operations overseas, the complexity and scope of the international Y2K problem places State and other agencies with a significant overseas presence at risk. Deployment of the ALMA (A Logical Modernization Approach) program is proceeding slightly behind schedule and is critically important for overseas posts. The integration of the U.S. Information Agency and the Arms Control and Disarmament Agency into the State Department is adding to the cost and complexity of State's Y2K program.
Treasury	The Department continues to make good progress on embedded chips, telecommunications, contingency planning, and data	The rate of renovation, validation, and implementation must improve if IRS and FMS are to meet the Governmentwide goals.

Agency	Progress	Concerns
	exchange issues. Most bureaus have achieved compliancy.	Treasury must continue to work towards a more unified Department wide business continuity and contingency plan.

TIER THREE AGENCIES

There are now 13 agencies in Tier Three (those making satisfactory progress), an increase from 11 in the previous report. Additions to Tier Three in this report are the Office of Personnel Management and the Department of Education. The other agencies in Tier Three are: the National Aeronautics and Space Administration, the Federal Emergency Management Agency, the Department of Housing and Urban Development, the Department of the Interior, the General Services Administration, the Department of Veterans Affairs, the Small Business Administration, the Environmental Protection Agency, the National Science Foundation, the Nuclear Regulatory Commission, and the Social Security Administration.

SMALL AND INDEPENDENT AGENCIES

In the November 15, 1998 report, OMB included information about nine key small and independent agencies. For the February 15, 1999 quarterly report, OMB requested that 35 additional small and independent agencies report on their Y2K progress. All 44 of these small and independent agencies will be asked to continue to report to OMB on a quarterly basis until they have finished their work. Once these agencies have demonstrated that their work is completed, they will no longer be asked to report to OMB.

Overall, the small and independent agencies are behind their large agency counterparts in preparing for the year 2000. Of the 44 reports received, 48 percent of the small and independent agencies state that their mission critical systems are already or will be compliant by the Governmentwide goal of March 1999. An additional 23 percent state that their mission critical systems will be compliant by June 1999, while 14 percent state that they will be compliant by September 1999, and 14 percent state that they will be ready by December 1999. Slightly more than half of the reports indicate that agencies have either not begun their work on business continuity and contingency plans or have barely started. For those agencies that are behind schedule, OMB will work with senior management to ensure that they will be ready.

Eight small and independent agencies state that their mission critical systems are currently Y2K compliant. These agencies are: the Defense Nuclear Facilities Safety Board, the Federal Trade Commission, the Legal Services Corporation, the National Credit Union Administration, the National Transportation Safety Board, the Railroad Retirement Board, the U.S. Commodity Futures Trading Commission, and the United States Arms Control and Disarmament Agency.

Table 6
Summary of Small and Independent Agency Reports
(amounts in millions)

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
African Development Foundation	4	.6	Good progress on IT systems.	Compliance is anticipated in October. Compliance is dependent on the outsourcing of an accounting system. ADF has a weak verification and validation plan. The Foundation needs a business continuity and contingency plan.
Armed Forces Retirement Home	6	3.0	Good progress on IT systems.	Anticipated compliance is in July. AFRH needs a business continuity and contingency plan. It appears that the AFRH has paid minimal attention to non-IT systems.
Corporation for National Service	31	1.1	The corporation is making progress on IT systems. Good management of the overall process. Verification and validation is underway.	Anticipated compliance is in June. CNS needs a business continuity and contingency plan. CNS compliance is dependent on new financial management system.
Defense Nuclear Facilities Safety Board	0	.15	Custom systems have been verified by contractor.	None.
District of Columbia Courts	25	2.2	Progress on IT systems continue. Good assessment of non-IT systems.	Anticipated compliance is in September. Compliance is dependent on the purchase and installation of hardware and software systems currently scheduled for May.
Equal Employment Opportunity Commission	9	6.7	Making progress on IT systems. Validation plan is in place.	Anticipated compliance is in September. Systems under repair will not be completed until September. EEOC needs a business continuity and contingency plan..

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
Export-Import Bank of the United States	12	.6	Good progress on mission critical IT systems.	Anticipated compliance is in April. The agency has a weak verification and validation plan and a business continuity and contingency plan is needed.
Farm Credit Administration	27	1.7	Good progress on IT systems. Compliance is anticipated in March. Verification and validation plan underway.	Weak contingency planning.
Federal Communications Commission	30	16.8	Of 8 remaining systems, 4 are in validation and 3 are in remediation. FCC expects to complete all but 2 systems by April 30th. Agreements reached on all 8 non-compliant data exchanges, with 3 being remediated. Obtained additional funds from Y2K contingency reserve, but regulatory fees are also being used to fund efforts. IG involved. Almost all systems that process license applications are now compliant. Will award the IV&V contract in March.	Completion is anticipated in October. Move to new building addresses problems with embedded systems but complicates other year 2000 work. Agency renovation milestones call for completion in October 1999, with 5 systems identified as missing the March 31 deadline. Rate of progress must be sustained, particularly in systems to be replaced. FCC states that preparation of a BCCP is unnecessary given their progress in addressing Y2K. Instead, contingency plans are based on work-arounds to agency processes, including manual license processing.
Federal Deposit Insurance Corporation	36	28.6	Excellent progress on IT systems. Anticipated compliance in March. Contingency plan underway.	None
Federal Election Commission	18	.8	Making progress on mission critical IT systems. The agency is 100% complete in its mission critical software conversion.	Anticipated compliance in October. FEC needs a business continuity and contingency plan. The verification and validation plan is weak. FECs payroll and personnel systems will be converted to National Finance Center in October 1999.
Federal Energy Regulatory Commission	12	2.3	Hardware compliance issues are being addressed and resolved. Making progress on completing mission critical IT systems.	Anticipated compliance is in May. FERC needs more work on verification and validation efforts and on contingency planning.

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
Federal Housing Finance Board	5	.34	Anticipated compliance is in March. Sound management of process. Good progress on IT systems.	Needs more work on business continuity and contingency plan.
Federal Labor Relations Authority	9	1.4	Good progress. All equipment and software have been purchased to fix or replace mission critical systems.	Anticipated compliance is in July, but is dependent on the agency's network upgrade project scheduled for completion in July 1999. The Authority needs a business continuity and contingency plan.
Federal Reserve System	103	45.8	Compliance is anticipated in March. Excellent progress. Excellent outreach.	None.
Federal Retirement Thrift Investment Board	0	.2	No mission critical systems, but non-mission critical applications (automated office automations) are nearly complete.	None
Federal Trade Commission	10	.5	Mission critical systems are compliant. Good progress on non IT systems.	FTC has a weak verification and validation plan. The business continuity and contingency plan needs more attention.
John F. Kennedy Center for the Performing Arts	3	.33	Sound management. Good progress on all phases.	Anticipated compliance is in June. Needs work on business continuity and contingency planning.
Legal Services Corporation	8	.41	All mission critical systems are compliant.	Weak contingency plan.
National Archives and Records Administration	22	7.1	Making progress on mission critical IT systems. Validation and verification effort underway.	Anticipated compliance is in August. Office automation equipment may need additional attention (NARANet). NARA needs a business continuity and contingency planning.
National Credit Union Administration	7	31.0	All mission critical systems are compliant.	None.

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
National Gallery of Art	11	.1	Excellent progress on IT systems. Anticipated compliance is in March. Sound management of all phases.	None.
National Labor Relations Board	29	14.2	Making good progress on mission critical IT systems. Good outreach for data exchanges. Compliance is anticipated in March.	Weak contingency planning.
National Mediation Board	6	.6	Good progress on IT systems.	Anticipated compliance is in June. Needs more work on business continuity and contingency planning. There are concerns with data exchanges with Treasury on two systems: GOALS and the Electronic Certification System.
National Transportation Safety Board	2	0	All mission critical systems are compliant.	Need more work on business continuity and contingency planning.
Neighborhood Reinvestment Corporation	4	.10	Two IT systems are now compliant. Verification and validation plan in place.	Anticipated compliance is in May. Two critical system replacements will not be completed until March. The Corporation needs a business continuity and contingency plan.
Office of Administration	68	24.5	A new project management team has established a management strategy. The agency has received funding from the emergency Y2K emergency reserve, and work is underway. EOP telephones are expected to be compliant by March 31, 1999. EOP PCs are expected to be Y2K compliant by June 1999.	Anticipated compliance is in October. Progress since the last report has improved greatly. Seventeen of 68 mission-critical systems are expected to be in the implementation phase or fully compliant by March 31, 1999. It is anticipated that 50% of systems will be implemented and/or compliant by June 1999, with 75% implemented and/or compliant by August.

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
Overseas Private Investment Corporation	4	3.2	Good progress on IT and non-IT systems.	OPIC has weak business continuity and contingency planning. Anticipated compliance is in April.
Peace Corps	16	17.1	Moved to a new headquarters building. Completed renovation and implementation of 14 systems. Payroll is shifting to USDA National Finance Center by June. Remediation of PC Financial Management System should be completed and testing should start in March. All non-MC systems have been renovated and tested. Data exchanges are now fully inventoried and are being fixed. The Corps is cooperating with international agencies and organizations to assess overseas issues. Final contingency and continuity plan will be in place in March.	Compliance is anticipated in April. Financial Management System will be implemented in June. Dependent on foreign banks for overseas disbursements to volunteers; the Peace Corps estimates that 75% of such banks are not Y2K compliant. Heavy reliance on State Department for financial and telecommunications services. Still must determine status of communications and fax systems in 8% of posts. Working with Foreign Affairs Interagency IRM Group to address Y2K implications for telecommunications overseas. The Corps is not using an independent IV&V contractor, but has established a formal, independent verification process based on user acceptance.
Pension Benefit Guaranty Corporation	13	5.5	Good overall progress on all IT and non IT phases. Anticipated compliance is in March.	Testing of data exchanges is needed.
Railroad Retirement Board	123	14.2	Stated mission critical systems are compliant. Good progress on non-mission critical systems	Needs business continuity and contingency plan.
Securities and Exchange Commission	53	14.0	Making progress on IT systems. Anticipated completion is in March. PC automation applications are compliant.	A number of mission critical replacement applications are still being addressed.
Selective Service System	7	1.2	Excellent progress. Compliance is anticipated in March. If data exchange source is not Y2K compliant, SSS will convert output data using a computation that will bring the data to year 2000	Needs business continuity and contingency plan.

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
			compliance.	
Smithsonian Institution	18	9.1	Making progress on IT systems.	Compliance is anticipated in September. A number of mission critical IT systems are being addressed. The institution needs business continuity and contingency plan. In addition, a independent verification and validation plan is needed.
Tennessee Valley Authority	448	37.0	TVA has made progress in assuring that its power generation, fossil units, and nuclear units and systems will be ready. Planned maintenance outages will be used to complete the remaining work.	Compliance is anticipated in December.
U. S. Arms Control and Disarmament Agency	31	.6	Mission critical systems are compliant.	The agency will merge with the State Department in April. Weak business continuity and contingency plan.
U.S. Commodity Futures Trading Commission	2	1.55	Mission critical systems are compliant. Good progress on contingency plans.	None.
U.S. Consumer Product Safety Commission	31	1.2	Good progress on mission critical IT systems. Anticipated compliance is in March. Good outreach efforts.	Weak contingency planning.
U.S. Holocaust Memorial Museum	65	1.7	Progress being made on IT systems. Anticipated compliance is in March. Good progress on verification and validation plan.	Potential for parts of the financial system to be non-compliant. The museum needs a BCCP.
U. S. Information Agency	57	6.4	Good progress on IT systems, PC upgrades underway. Anticipated compliance is in March. Verification and validation plan underway.	USIA needs a business continuity and contingency plan. The agency status is complicated by the impending merger (October 1, 1999) with the State Department. USIA is working to integrate their

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
				payroll, personnel, and financial management systems with State's. There are additional concerns regarding compliance with overseas systems. Incomplete information on anticipated date of full compliance.
U. S. International Trade Commission	5	1.2	Making progress on most mission critical IT systems.	Anticipated compliance is in January 2000. The Electronic Document Imaging System will not be ready. Components of the system are no longer supported by the vendor community. The commission needs a verification and validation plan. In addition a contingency plan is needed.
U.S. Office of Special Counsel	11	0.1	Making progress on IT systems. All non-mission critical systems are being retired.	Anticipated compliance is in October. Voice mail and some hardware are in the renovation stage. Weak verification and validation plan. A business continuity and contingency plan is needed.
U. S. Postal Service	152	607	The USPS continues to make good progress in addressing the problem in its mission critical systems. The number of compliant mission critical systems has risen from 90 last quarter to 106 this quarter. Considerable progress has also been made in addressing embedded chip problems in mail processing equipment.	Anticipated compliance is in June. Given its size, geographic distribution, and importance as a link as information providers to the public, the USPS still faces a substantial challenge. A significant amount of work remains to be done. USPS needs to accelerate efforts to establish mutually acceptable procedures with its severe/critical exchange partners.
U.S. Trade Representative	5	1.2	Anticipated compliance is in March. Funding includes replacement of LAN/desktop infrastructure. All workstations on unclassified LAN are Y2K compliant running Y2K compliant software. 4 MC systems are standard COTS office support packages or simple databases that will be replaced. 1 MC system is being renovated and should be completed in March. Geneva and Brussels are compliant. IV&V effort	USTR needs to complete the inventory, repair, and verification of data exchanges. Four of seven entities affected are Y2K compliant. USTR is working to identify embedded systems in overseas locations. USTR needs to formalize its contingency plans -- although their role as a "staff" agency should make their plans straightforward.

Agency	No. MC Systems	Total Cost (FY96--FY00)	Progress	Concerns
			underway.	

V. SYSTEMS THAT WILL MISS THE MARCH 31 DEADLINE FOR IMPLEMENTATION

OMB also requires agencies to develop contingency plans for those systems that have been behind the agency's internal schedule for two months or more over two reporting periods or that won't meet the March 31, 1999, Governmentwide implementation goal. During this quarter, few agencies reported slippage from their internal schedules, while several accelerated their work to get back on track. At this time, all agencies have described their process for developing contingency plans, including milestones. For many, this means repairing a legacy system instead of replacing it. Through the remainder of the year, OMB will be asking agencies to focus harder on ensuring that these systems are fixed, while at the same time continuing work on contingency plans for these systems.

U.S. Agency for International Development

USAID and a contractor continue to review the agency's plans and requirements for addressing their mission critical systems and adjusted project schedules based on a number of factors. As a result of this review and adjustment, five USAID mission critical systems will be implemented after the March 1999 goal. Most significantly, a data link that contains embedded processing was found between the Revised Automated Manpower and Personnel System (RAMPS) and the New American Payroll System (NAPS). This link has caused the RAMPS system, previously considered to have been Y2K compliant and fully implemented, to face additional renovation and testing. RAMPS is projected to be fully implemented in May 1999.

While renovation of the Mission Accounting and Control System (MACS) was just completed, validation and implementation will not be completed until March and May of 1999. USAID is taking steps to accelerate this process by establishing more aggressive timetables for deployment of operating systems, completion of hardware upgrades and pre-deployment testing. This is a particularly important system for USAID, as it is the only automated accounting system available to missions worldwide. The Agency's complex financial management, procurement, budget and program management system, called the New Management Systems (NMS) is scheduled for implementation in July 1999, two months earlier than reported last quarter. Funding previously received from the contingent emergency reserve will help accelerate implementation. USAID will have contingency plans in place for both of these systems by June 1999.

The schedule for the American Electronic Time and Attendance (AETA) system, currently under renovation, has slipped one month. This slip is due to additional time required for independent verification and validation testing and end-to-end testing prior to implementation. Additionally, this system must be deployed world-wide. AETA is projected to be implemented in April and has a contingency plan in place. The New American Payroll System (NAPS) is also experiencing delays -- in part attributable to the identification of additional Y2K issues related to RAMPS and the bridging system that connects it with NAPS. USAID has taken a number of steps to address both the remediation of the RAMPS and NAPS systems and overall testing of integrated systems. NAPS is expected to be implemented in May.

USAID is also replacing two systems, the Financial Accounting and Control System (FACS) and the Loan Accounting Information System (LAIS). While FACS will be integrated into version 4 of NMS, USAID is still developing a strategy for handling the historical data resident on the system. USAID has out-sourced many of the loan servicing functions that LAIS supported and is working with the contractor to identify what LAIS functionality and historical data need to be supported. USAID expects to resolve the LAIS and FACS issues by September 1999. USAID is working to accelerate deployment of its new desktop infrastructure and upgrades to routers and other local and wide area networks in order to support deployment of mission critical applications.

USAID has instituted a two-phase contingency and continuity of business planning process to address these systems. The first identifies the risks and scenarios as well as mitigation strategies and options. This phase was completed in December 1998 for all systems except AETA which has already developed a plan. Phase 2 is the detailed planning process including establishment of trigger points and will be completed in June 1999.

U.S. Department of Agriculture

Two systems from the Animal and Plant Health Inspection Service (APHIS) that were reported behind the Governmentwide goals in the previous report have been removed from the exception report. The two are the Licensing and Registration Information System (LARIS) and the Integrated Systems Upgrade Project (ISUP). LARIS tracks the validity of licenses, registrants, and inspection records about the Animal Welfare Act. The renovation phase was completed on February 26; the validation phases now in progress, and implementation will be completed by March 31, 1999. ISUP was divided into three modules (Financials, Personnel and Purchasing). The Financials module is being remediated by contractors while the Personnel and Purchasing modules will be replaced by March 31, 1999 with systems currently in use in other Federal agencies.

Two new systems have been added to the list from APHIS: Laboratory Information Management System (LIMS) and the Generic DataBase (GDB). Two new systems have been added to the report for the first time. Laboratory Information Management System (LIMS) is a replacement system being done by a contractor. The core LIMS system is expected to be installed and ready to begin use by March 31, 1999. The old system will run in parallel while users are transitioned to the new system. The old system will be retired by September 30, 1999. Additional personnel and contractor support have been assigned to the project to accelerate progress. The Generic DataBase (GDB) stores data used to analyze the spread and control of animal diseases. Additional contractor hours have been acquired to complete this work and a field version of GDB is expected to be remediated by March 31, 1999. Full implementation is projected to be completed by June 30.

Two other systems that were reported as exceptions in USDA's quarterly report, but have since been re-scheduled, are the SF-1 Tracking and GPO Form 2511 Tracking systems. These two systems are being replaced by systems being developed by a contractor. The expected completion date indicated in the quarterly report was April 1999. Since reporting this information and after discussion with the contractor, it has been determined that the systems will be implemented on or

before the March 31, 1999, deadline.

The Census of Agriculture is carried out every five years. The new, Y2K compliant system that supports the Census will be ready for the next census, which begins in 2001.

The Accounts Receivable System keeps subsidiary transactions level accounts for producers who were once insured directly by the agency. This includes all the billing, payment, and indemnity information, as well as any subsequent adjustments. This system is scheduled for retirement on September 30, 1999. The second system, Debt Management System, handles all phases of debt processing, including due process, interest attachment, establishment of a debt account, debt reporting interfaces with the Internal Revenue Service, credit reporting agencies, credit bureaus; and the 10 year write-off process. It is also scheduled for retirement on September 30, 1999.

The Federal Tax Refund Offset Program, which collects delinquent accounts owed to the Government by individuals due to fraud or household error in the Food Stamp Program. While this system is not date driven, it is considered mission-critical. USDA can not proceed independently from the Department of Treasury, which has indicated the replacement. This system is scheduled for replacement in December 1999.

The Financial Accounting and Reporting System (FARS) manages internal funds control and reporting. The vendor has revised its estimated completion date to be October 1, 1999.

The Cotton On-line Processing System monitors cotton inventories and price support loans. It also maintains electronic receipts and keeps track of benefits. The Department has approved a replacement strategy, and its completion is scheduled for July 1999.

Overall, USDA has made significant progress in developing contingency plans for systems that will be implemented after the March 1999 deadline. All systems that will miss the deadline now have contingency plans in place.

Department of Commerce

The Patent and Trademark Office reports that the Classified Search and Image Retrieval (CSIR) system will not be Y2K compliant by March 31, 1999. The CSIR provides patent examiners with the capability to electronically search and retrieve U.S. patent images from their desktop workstations. PTO indicates that the CSIR system will be compliant by June 30, 1999. This system is delayed due to the contractor's continued inability to place qualified staff on the task. A contingency plan was submitted on August 14, 1998 for this system.

NOAA reports that the Aeronautical Charts Automated Distribution System has encountered procurement delays which are expected to delay the award date until April 30, 1999. This system will not be able to begin validation nor implementation until it is delivered, expected August 31, 1999. In addition, NOAA reports that the NCEP Class VIII Supercomputer System will not be operationally compliant until November 1, 1999. However, NOAA has made the Class VII

Supercomputer System compliant and intends to use it as a contingency measure. There is one more NOAA system that will miss the March 31, 1999 deadline — the Wind Profiler System. Corrections to the Wind Profiler Systems operating system by Lockheed-Martin have brought that portion of the system into compliance. However, algorithmic software changes must be made in Programmable Read Only Memory (PROM) that must be installed in the Wind Profiler data collection systems. Lockheed-Martin has been slow to deliver these new PROMs and an implementation date of October 1, 1999 has been projected. DOC reports that a BCCP is being developed for mission critical NOAA systems, but did not indicate whether the Aeronautical Charts System or the Wind profiler System were included in those plans. Should any problems occur, the result would be reduction in quality of wind data.

ESA reports that the National Trade Databank CD-ROM (Compact Disk-Read Only Memory) reader will not be compliant until April 1999. However, an Internet version will be made available as a contingency. If this system is not repaired on time, the result would be that individuals without internet access would have to rely on paper data instead of access by CD-ROM.

EDA reports that the Fund Accounting System (FAS) installation, modification and data conversion for the EDA version for the Commerce Administrative Management Systems (CAMS), which will be used to replace the FAS for grant financial accounting, is about to be contracted. This install is expected to be completed by June 30, 1999. EDA has a BCCP which has been tested recently (due to a fire) and demonstrated success in continuing operations.

NTIS reports that its systems, including the Fedworld World News Connection, were not funded for remediation until NTIS made a request to the Y2K emergency reserve. Now that the request has been funded, renovation is expected to be completed by March 31, 1999, with final testing completed by April 1999.

Department of Defense

The Department of Defense reports that the number of systems that have fallen behind schedule by two months or more has risen from 65 as reported in November to 172 in the current report. In addition, the Department reports that 156 systems (an increase of 102 systems from November) are now expected to miss the March 31, 1999 deadline for compliance. The Department is taking an active roll and monitoring progress on each of these systems to assure that they will be compliant prior to 2000 and is preparing contingency plans for each.⁶

Department of Energy

In the November quarterly report, the Department had identified seven systems with implementation dates beyond the March 1999 milestone. There are now eight systems with implementation dates beyond the March 1999 milestone. In this quarter's report, two systems, one at Savannah River and the other at Idaho National Engineering Laboratory, have accelerated their

⁶ Does not include systems that support the intelligence community.

schedules to meet the March 1999 milestone, but three additional systems -- two at Sandia and one at Oak Ridge -- are now going to miss the March 1999 milestone. The eight systems are at three DOE facilities -- Oak Ridge, Sandia National Lab, and Savannah River.

At the Oak Ridge facility, the Human Resources System Modernization effort (an effort to improve the way this facility manages its human resources) was to have been completed by delivery of a Y2K compliant COTS product -- CYBORG -- by Lockheed Martin Energy Systems. The CYBORG version delivered was tested for Y2K compliance, and it was determined that the current version of the product does not handle leap year processing correctly. Lockheed Martin is working to upgrade their product. Since Oak Ridge heavily customizes the end product, implementation of a Y2K compliant product is not expected until early to mid-summer.

At Sandia National Laboratories, the Enhanced Badge Works system, which is the identification and access control system for the Lab, is not Y2K compliant, and implementation of a fully compliant system is not anticipated until August 31, 1999. However, the Badge Office has a well documented contingency plan with triggers set to revert to a manual process if the Y2K compliant system is not ready on time. Two new systems, the Human Resource Information System and the Payroll system, are in the process of being certified as Y2K compliant. However, the vendor will not support the version of the system Sandia has after June 1999, so Sandia's contingency plan is to upgrade to the most recent version and certify that version as Y2K compliant. This upgrade and testing will be completed by June of 1999. Contingency plans are in place and have established triggers.

At the Savannah River site there are four systems. The Nuclear Materials Stabilization Program Operations System (implementation date of September 30, 1999), the Tank Farm Process Control System (implementation date of October 31, 1999), the Defense Waste Processing Facility Process Control System (implementation date of October 31, 1999), and the Defense Waste Processing Facility Manufacturing Support System (implementation date of October 31, 1999). These systems range in function from controlling the recovery of Plutonium and Uranium from irradiated targets, through the monitoring and control of high-level waste into a glass form for storage in steel containers.

The Department is scheduled to complete contingency plans for all of these systems no later than March 31, 1999.

Environmental Protection Agency

EPA reported in their November quarterly report that the Air Quality (AQ) Subsystem of the Aerometric Information Retrieval Systems (AIRS) was experiencing delays. Accordingly, renovation, which had been scheduled for November 1998, would not be achieved on time, and therefore implementation of a reengineering AQ Subsystem was in danger of not meeting the March 1999 goal. The other three Subsystems of AIRS had either completed implementation or were on schedule. To forestall the potential that the AQ Subsystem would not meet the March 1999 goal, a decision was made to renovate the existing AQ Subsystem to AIRS and use the renovated system

until work was completed on the reengineered AQ Subsystem. In this quarter's report, renovation, validation, and implementation of the existing AQ Subsystem to AIRS was completed in January 1999.

Department of Health and Human Services

In the November quarterly report, the Health Care Financing Administration (HCFA) indicated that all Medicare contractors had developed revised schedules to meet the Governmentwide deadline. In this quarter's report, HCFA reports that the Arkansas Part A Standard System (APASS) maintainer was scheduled to produce a Y2K compliant version of its software for unit testing on January 27, 1999. However, APASS experienced production problems and was unable to meet the January 27 deadline. HCFA acknowledges that Arkansas missing this deadline puts the certification of the APASS users by March 31, 1999 at significant risk. Seven contractors are dependent on APASS and had completed their renovations, but were unable to use a compliant version of APASS to validate their system. Five other Medicare contractors are reported as having late Initial Power-on Load⁷ (IPL) testing dates for components of their systems. These five are the Empire BCBS Medicare front-end, the United Government Services of Wisconsin's new Michigan workload, the Mississippi BC and UHC systems, which require integrated testing, and Rhode Island Blue Shield, which still needs to complete IPL testing.

In the August quarterly report, four HCFA external systems (that is, systems run by Medicare contractors) were reported with scheduled implementation dates two or more months behind the HHS internal goal of December 31, 1998. As of this quarter's report, all of these four systems have met their revised implementation dates and are no longer behind HCFA's internal schedule. HCFA worked with Medicare contractors to develop revised schedules, which met the Department's internal goal, for three of these four systems. The three Medicare contractors which revised their schedules were Blue Cross/Blue Shield of Arkansas (Part B); Blue Cross/Blue Shield of Arkansas, New Mexico, and Oklahoma (Part B); and Blue Cross/Blue Shield of New Hampshire and Vermont (Part A). The fourth previously reported system, Trigon Blue Cross/Blue Shield of Virginia (Part A), was scheduled for completion after the Department's internal goal, but with a revised implementation date of February 18, 1999, (one month earlier than the previously reported March 31, 1999 date).

In addition to the HCFA systems, HHS adds a new system scheduled for implementation beyond the March 31, 1999 deadline. The additional system is the Payment Management System (PMS) operated by the Program Support Center (PSC). The PMS provides centralized electronic funding and cash management service to all organizations receiving HHS grants -- including all 50 states. The PMS supports organizations funded by ten other federal agencies and 42 different subagencies. In FY 1998 the system made 260,000 payments totaling \$165 billion to 20,000 grantees. The level of concern for PMS is based on the findings of an independent study that indicates the PMS can not be certified as Y2K compliant by March 31, 1999. PSC hopes to have

⁷ Initial Power-on Load testing is essentially "booting up" a mainframe computer and providing it with the initial date and time parameters it needs to know what date and year it is.

completed validation and implementation on the PMS by June 1999. An independent study indicates a worst case scenario of implementation in August 1999.

Department of Justice

The most recent quarterly report shows a total of 16 systems that will miss internal Justice milestones for renovation (July 1998), validation (October 1998), or implementation (January 1999) by more than two months. The Department states that all these systems will meet the Governmentwide March 1999 goal.

Justice again identified eleven mission critical systems that will miss the March 1999 implementation goal -- the same number as reported in November. Among the newly identified systems are the Environmental and Natural Resources Division (ENRD) Justice Consolidated Office Network II (JCON II), which is the office automation system for the Division. The Justice Management Division (JMD) identified the Data Library as a system to be replaced by the Acquire system, which will be acquired in October 1999. This system is used to order legal publications. The National Drug Intelligence Center (NDIC) identified the Main Network System, which provides networked office automation to NDIC's analysts, as missing the March 1999 deadline. Due to contract delays, its implementation date has slipped to April 1999. Contingency plans have been drafted for all three systems.

Three systems are no longer being reported by Justice as missing the March 1999 deadline. The FBI decided to renovate rather than replace the Digital Monitoring Workstation and will complete this project by the March 1999 deadline. The Justice Management Division reclassified the Card Key System as non-mission critical. The Department also reclassified the Local Area Network that supports the Immigration and Naturalization Service (INS) as part of the Service's overall infrastructure rather than as a separate mission critical system. INS is upgrading LANs at locations throughout the world and expects to complete this effort in July.

Eight other Justice Department systems will be implemented after the March 1999 goal. Contingency plans for these systems have been or are being developed and will be reviewed by the IV&V contractor.

State Department

The State Department has identified two systems as falling behind Departmental milestones by more than two months. The Office of Management Policy and Planning (M/P) Information system provides comprehensive information on staffing. The system is being converted from a mainframe to a personal computer platform and has experienced delays in data conversion and completion of its report generating capabilities. The Bureau of Administration's Enhanced Automated Procurement System (EAPCS), used by the Department to support purchases of goods and services, has also missed internal milestones. Both systems are projected to be completed by March 31, 1999.

The State Department has identified four systems as not meeting the March 1999 goal for implementation. The Travel Document Issuance System has been deployed in New Hampshire and will be deployed at New Orleans in March. Together, these sites process 50 percent of all passports. State expects the system to be fully deployed at all twelve sites by August 1999. A contingency plan has been developed.

State's Bureau of Administration identified the Supply Automated Receiving System (SARS) as not scheduled to be fully implemented until April 1999. SARS serves as the Department's central warehouse and shipping point. The application has proven to be more complex than originally envisioned. Additionally, State found that the system did not adequately reflect the fashion in which actual operations were conducted. State is developing contingency plans that will be finalized during user acceptance testing of SARS in March and April.

The Bureau of Finance and Management Policy Overseas Financial Management System (OFMS) provides accounting and disbursement support for posts and other U.S. Government agencies that operate world-wide. OFMS is being implemented at Charleston, South Carolina now and should be completed in March. However, OFMS will not be fully implemented in Bangkok, Thailand until April. Additional work may be required to adequately configure the Bangkok installation to reflect local systems interfaces. A contingency plan is being prepared for both locations and should be completed by May. The Bureau's Foreign Service National (FSN) Payroll System for Paris processes payroll for FSN employees in Africa, parts of Europe, and the Middle East. Y2K completion has been hindered by the requirement to complete a French Social Security sub-system as well as data conversion problems. Additionally, delays in implementing the FSN Charleston system (completed in December) slowed the efforts in Paris. Implementation is expected to be completed by April 30th. Contingency plans are being drafted and should be completed by June 30.

In an improvement from the previous report, the Department has taken steps to accelerate deployment of ALMA (A Logical Modernization Approach) upgrades to over 230 State Department posts worldwide and anticipates that installation will be completed by March 1999. A number of Consular Affairs mission critical systems, including the Automated Citizen Services function, Modernized Immigrant Visa system, and Non-Immigrant Visa and Computer Assisted Processing systems, are being deployed concurrently with installation of the ALMA package. As of January 22, 1999 ALMA has been deployed to 171 of 175 posts worldwide. Follow-up visits to address remaining Y2K issues as well as to update the security and technology will be completed by April 30, 1999. State is preparing continuity of business plans should any posts or embassies not have ALMA installed in time to meet the millennium. This phase will be completed by June.

Department of Transportation

The Federal Aviation Administration (FAA) continues to face a significant challenge in validating and implementing hundreds of systems, particularly air traffic control systems which require extensive end-to-end testing. At the present time, the FAA estimates that 64 systems will not be implemented by March 1999, up from 61 systems reported last quarter, a number of which

are critical to FAA's telecommunications and data exchange infrastructure. The FAA presently expects to complete validation activities by March 1999 and implementation activities by June 1999. The U.S. Coast Guard reports that six systems remain behind schedule, but significant progress is being made on its safety related systems. The Department states that it has contingency plans for all its systems.

Treasury

Three systems within the Bureau of Alcohol, Tobacco, and Firearms (ATF) remain behind schedule for implementation by the March goal. One system, the Firearms Licensing System, fell further behind in its scheduled implementation date. Contingency plans for these systems have been completed and approved for implementation if necessary.

The Federal Excise Tax System (FET) manages the collection of Federal excise taxes on alcohol, tobacco, and firearms. This system was previously assessed as compliant. However, when certification testing began, it was determined that the system was not compliant and that replacement was necessary. This system is currently scheduled for implementation on July 16, 1999.

The Firearms Licensing System (FLS) processes Federal firearms licenses, Federal explosive licenses, letters, and electronic data for out-of-business dealers. This system was previously assessed as compliant. However, when certification testing began, it was determined that the system was not compliant and that replacement was necessary. FLS was scheduled for implementation on July 31, 1999, but it has been pushed back until August 31, 1999.

The Alcohol and Tobacco Database (A&T) is used to track smuggling of alcohol and tobacco products. The system provides criminal enforcement and regulatory enforcement users with detailed information related to illegal activities of wholesalers, distillers, and distributors. A&T is currently scheduled for implementation on May 26, 1999.

Appendix A
Table 1
Progress on Status of Mission Critical Systems

Mission Critical Systems						
	Total Number	Number Compliant	Percent of Total	Number Being Replaced	Number Still Being Repaired	Number Being Retired
Agriculture	353	267	76%	35	44	7
Commerce	474	409	86%	26	37	2
Defense	2306	1670	72%	62	492	82
Education	14	13	93%	0	1	0
Energy	420	357	85%	29	20	14
HHS ⁸	289	250	87%	6	31	2
HUD	56	55	98%	1	0	0
Interior	90	86	96%	0	4	0
Justice	221	190	86%	7	24	0
Labor	61	52	85%	3	6	0
State	59	36	61%	18	5	0
Transportation	608	321	53%	53	233	1
Treasury	321	266	83%	14	34	7
VA	319	309	97%	1	9	0
USAID	7	0	0%	2	5	0
EPA	57	57	100%	0	0	0
FEMA	46	41	89%	3	2	0
GSA	58	56	88%	1	1	0
NASA	157	136	87%	5	13	3
NRC	7	7	100%	0	0	0

⁸ HHS reports that HCFA has achieved qualified Y2K compliance for 54 of 78 external systems. The qualified status of compliance is based on the results of a report by HCFA's IV&V contractor which analyzed the self-certification of compliance provided by each external system maintainer. The IV&V contractor identified 17 systems that were Y2K compliant without any qualifications. The remaining 37 systems reported as compliant had qualifications indicating the need for additional work to achieve full Y2K compliance.

NSF	17	17	100%	0	0	0
OPM	109	100	92%	4	5	0
SBA	42	42	100%	0	0	0
SSA	308	308	100%	0	0	0
TOTAL	6399	5045	79%	270	966	118

Appendix A
Table 2
Status of Mission Critical Systems Being Repaired

	Number of Systems	Assessment Percent Complete	Renovation Percent Complete	Validation Percent Complete	Implementation Percent Complete
Agriculture	263	100%	98%	92%	83%
Commerce	160	100%	92%	88%	77%
Defense	1591	100%	93%	79%	69%
Education	14	100%	100%	100%	93%
Energy	170	100%	99%	92%	88%
HHS ⁹	154	100%	100%	81%	79%
HUD	41	100%	100%	100%	95%
Interior	84	100%	100%	98%	95%
Justice	158	100%	96%	89%	85%
Labor	29	100%	100%	86%	79%
State	13	100%	100%	77%	62%
Transportation	307	100%	98%	79%	24%
Treasury	231	100%	97%	90%	85%
VA	317	100%	100%	99%	97%
USAID	5	100%	80%	20%	0%
EPA	29	100%	100%	100%	100%
FEMA	15	100%	100%	100%	87%
GSA	23	100%	100%	100%	96%
NASA	101	100%	99%	97%	87%
NRC	4	100%	100%	100%	100%
NSF	10	100%	100%	100%	100%
OPM	80	100%	100%	96%	94%
SBA	42	100%	100%	100%	100%
SSA	289	100%	100%	100%	100%
TOTAL	4130	100%	96%	87%	76%

⁹ HHS reports that HCFA has achieved qualified Y2K compliance for 54 of 78 external systems. The qualified status of compliance is based on the results of a report by HCFA's IV&V contractor which analyzed the self-certification of compliance provided by each external system maintainer. The IV&V contractor identified 17 systems that were Y2K compliant without any qualifications. The remaining 37 systems reported as compliant had qualifications indicating the need for additional work to achieve full Y2K compliance.

Appendix A
Table 3
Agency Year 2000 Cost Estimates¹⁰ (in millions)

	1996	1997	1998	1999	2000	TOTAL
Agriculture	2.5	15.6	61.5	85.6	10.2	175.4
Commerce	2.6	12.4	35.6	62.5	6.6	119.7
Defense ¹¹	22.8	386.7	1200.1	903.4	97.3	2610.2
Education	0.1	1.4	19.6	15.4	3.8	40.3
Energy	1.0	20.0	84.6	83.6	15.7	204.9
HHS ¹²	7.2	32.1	190.9	386.3	165.2	781.7
HUD	0.7	6.2	20.8	23.2	11.3	62.2
Interior	0.2	2.8	10.6	63.2	0.7	77.5
Justice	1.6	7.6	34.0	105.1	1.7	150.0
Labor	1.7	5.4	14.5	23.7	10.0	55.3

¹⁰ These estimates do not include the Federal share of costs for State information systems that support Federal programs. For example, the Agriculture total does not include the potential 50 percent in Federal matching funds provided to States for Food and Consumer Services to correct their Y2K problems.

¹¹ DOD estimates \$1.92 million in FY 2001 costs, which is not included in the total. \$935 million of the 1999 emergency supplemental appropriation was released to DoD on March 4, 1999. Because of the recency of this action, DoD has just begun to incorporate this emergency supplemental appropriation into its FY 1999 Y2K budget.

¹² HHS' FY 2000 costs will likely be between \$165 million and \$500 million. The \$165 million shown reflects the Administration's budget request. HHS' total FY 2000 Y2K cost estimate to OMB, however, includes over \$300 million in potential costs of implementing HCFA contingency and business continuity plans -- reaching a total of \$476 million in their Feb 99 quarterly report to OMB. Potential FY 1999 emergency reserve Y2K spending plans still under consideration by OMB are also not reflected.

State	0.5	49.3	63.1	60.4	6.8	180.1
Transportation ¹³	0.4	11.2	121.9	154.5	6.2	294.2
Treasury ¹⁴	8.1	200.2	592.7	477.9	254.7	1533.6
VA	3.3	22.0	70.0	94.4	13.6	203.3
USAID	1.1	3.0	21.8	18.8	3.2	47.9
EPA	0.8	5.3	11.5	18.6	1.0	37.2
FEMA	3.8	4.4	3.0	8.3	0.5	20.0
GSA	0.2	0.8	8.7	22.8	0	32.5
NASA	0.1	6.4	28.2	11.1	0.9	46.7
NRC	0	2.4	4.0	3.9	0	10.3
NSF	0	0.5	0.8	0.1	0	1.4
OPM	1.7	2.1	9.2	2.2	0.7	15.9
SBA	1.7	3.3	2.7	5.9	0.5	14.1
SSA	2.2	13.3	13.9	7.1	3.0	39.5
TOTAL	64.3	814.4	2623.7	2638.0	613.6	6754.0

¹³ Does not include \$81.3 million in non-Y2K costs funded with emergency supplemental funds from the Information Technology and Related Expenses Account.

¹⁴ Does not include \$91.7 million in non-Y2K costs funded from the emergency supplemental appropriation.

Appendix A -- Table 4
Status of Y2K Supplemental Contingent Emergency Funding – FY 1999 ¹⁵
(budget authority, in millions of dollars)

Large Agencies	Funding	Small Agencies	Funding	Other	Funding
Agriculture	37.8	African Development Foundation	0.1	Legislative Branch	29.9
Commerce	49.3	Commodity Futures Trading Commission	0.4	District of Columbia	61.8
Defense	935.0	Corn for National and Community Service	0.8	DC Courts	2.2
Education	3.8	EXOP/Office of Administration	19.9		
Energy ¹⁶	10.2	EXOP/USTR	0.5		
HHS	282.5	ECC	8.5		
HUD	12.2	Federal Labor Relations Authority	0.2		
Interior	52.1	ETC	0.6		
Justice	84.4	NARA	6.7		
Labor	14.7	Office of Special Counsel	0.1		
State	57.9	OPIC	2.1		
Transportation	159.0	RRB	0.3		
Treasury	569.6	SEC	7.4		
USAID	10.2	Selective Service System	0.3		
FEMA	7.4	Smithsonian	4.7		
GSA	22.5	National Gallery of Art	0.1		

¹⁵ For agencies that appear in Table 3, emergency funding is included within cost estimates (except where emergency funding has been directed for non-Y2K costs, as specified in footnotes 13 and 14). For other agencies, funding would address costs beyond those specified in Table 3.

¹⁶ Department of Energy estimate does not include \$13.65 million allocated on February 3, 1999.

SBA	44	US Holocaust Memorial Council	0.9		
		USIA	7.1		
Large Agency Total	2313.0	Small Agency Total	60.7	Other Total	93.9
Total, Emergency Releases 2,494.9					

Appendix B

Descriptions of Key, Federally Supported, State-run Programs

Food Stamps

The Food Stamp Program provides low-income households with coupons or with electronic benefits transfer (EBT) cards to ensure that they have access to food. The critical automated systems that are involved in the transfer of Federal funds to States and include systems that enable the States to issue coupons or EBT cards, monitor eligibility, track EBT expenditures, and process data for reporting purposes. USDA administers the Food Stamp Program through the Food and Nutrition Service (FNS), which distributes funds to the States. State agencies administer the program at State and local levels, including determination of eligibility and allotments.

Unemployment Insurance (UI) ¹⁷

The Unemployment Insurance program is a Federal-State partnership which serves approximately 10 million unemployed workers annually. Direct program operations are the responsibility of 53 State Employment Security Agencies (SESAs) which determine claimant eligibility, issue payments, and provide assistance to workers and employers in accordance with the laws passed by the 50 States, Puerto Rico, the Virgin Islands, and the District of Columbia. The Department of Labor oversees the administration of the program nationwide. Automated systems in the SESAs process benefits and taxes, maintain wage histories, and interface with many other automated systems.

Temporary Assistance for Needy Families (TANF)

On August 22, 1996, President Clinton signed into law "The Personal Responsibility and Work Opportunity Reconciliation Act of 1996," a comprehensive bipartisan welfare reform plan that dramatically changed the nation's welfare system into one that requires work in exchange for time-limited assistance. The Temporary Assistance for Needy Families (TANF) program replaces the former Aid to Families with Dependent Children (AFDC) and Job Opportunities and Basic Skills Training (JOBS) programs, ending the federal entitlement to assistance. In TANF, states and territories operate programs, and tribes have the option to run their own programs. States, territories, and tribes each receive a block grant allocation with a requirement on states to maintain a historical level of state spending known as maintenance of effort. The total federal block grant is \$16.8 billion each year until Fiscal Year (FY) 2002. The block grant covers benefits, administrative expenses, and services. States, territories, and tribes determine eligibility and benefit levels and services provided to needy families.

¹⁷ DOL and the SESAs have successfully met the unemployment insurance (UI) system's first major Year 2000 challenge.

Medical Assistance Program (Medicaid)

Title XIX of the Social Security Act is a Federal-State matching entitlement program that pays for medical assistance for certain vulnerable and needy individuals and families with low incomes and resources. This program, known as Medicaid, became law in 1965 as a jointly funded cooperative venture between the Federal and State governments ("State" used herein includes the Territories and the District of Columbia) to assist States furnishing medical assistance to eligible needy persons. Medicaid is the largest source of funding for medical and health-related services for America's poorest people. In 1996, it provided health care assistance to more than 36 million persons, at a cost of \$160 billion dollars. Within broad national guidelines established by Federal statutes, regulations and policies, each State: (1) establishes its own eligibility standards; (2) determines the type, amount, duration, and scope of services; (3) sets the rate of payment for services; and (4) administers its own program.

Child Nutrition Programs

Child Nutrition Programs include the National School Lunch Program, the School Breakfast Program, the Special Milk Program, the Child and Adult Care Food Program, the Summer Food Service Program, and the Nutrition Education and Training program. All of these programs are administered by the Food and Nutrition Service at the USDA. These programs assist State and local governments in providing healthful, nutritious meals to children in public and non-profit private schools, child care institutions, adult day care centers, and summer recreational programs.

Child Support Enforcement Program

The goal of the Child Support Enforcement (CSE) Program, which was established in 1975 under Title IV-D of the Social Security Act, is to ensure that children are financially supported by both their parents. The CSE Program recognizes the importance to children of access to their noncustodial parent and includes grants to help States establish programs that support and facilitate noncustodial parents' visitation with and access to their children. The CSE program is usually run by state and local human services departments, often with the help of prosecuting attorneys, other law enforcement agencies, and officials of family or domestic relations courts. The Child Support Enforcement Program provides four major services: locating noncustodial parents, establishing paternity, establishing child support obligations, and enforcing child support orders.

Child Care Program

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PL. 104-93) combined existing child care programs with different target populations into one block grant program with a single set of eligibility criteria and requirements. In 1999, the Child Care and

Development Fund (CCDF) made available \$3.2 billion to States and Tribes. Tribes received approximately \$63 million for FY 1999. These funds support activities, authorized under the Child Care and Development Block Grant Act of 1990, to improve the quality of child care and to provide financial assistance to low-income families seeking child care so they can work or attend training or education programs.

Child Welfare Program

With an annual budget of over \$4 billion, the Children's Bureau works with State and local agencies to develop programs to assist America's children and their families. The Children's Bureau administers nine state grant programs and six discretionary grant programs. State Grant Programs include grants for foster care, adoption assistance, independent living for older foster children, family preservation and support services, child welfare services, prevention of medical neglect/disabled infants, and programs designed to improve the investigation and prosecution of child abuse and neglect cases.

Special Supplemental Nutrition Program for Women, Infants, and Children

Popularly known as WIC, this program provides supplemental food, health care referrals, and nutrition counseling, for low-income pregnant, breast-feeding, and non-breast-feeding postpartum women, and to infants and children who are found to be at nutritional risk. More than 7 million people receive WIC benefits each month. The U.S. Department of Agriculture, through the Food and Nutrition Service (FNS), administers Federal grants to States. In turn, most State WIC programs provide vouchers that participants use at authorized food stores; 46,000 merchants nationwide accept WIC vouchers. Often, local organizations cooperate in providing the food and health care benefits. Federal systems support electronic benefits transfer of grants. State systems track expenditures and reconcile available funds.

Low Income Home Energy Assistance Program

LIHEAP is a federal block grant program that assists eligible low income households in meeting their home energy needs. The Federal Government does not provide energy assistance benefits directly to individuals. Energy assistance is provided through LIHEAP grants made to the 50 States and the District of Columbia, Indian tribes and tribal organizations, and insular areas. LIHEAP funds can be used for the following types of energy assistance: heating assistance, cooling assistance, energy crisis intervention, and low-cost residential weatherization and other energy-related home repairs.

Appendix C
Key Federal Web Sites on the Year 2000

Site	URL	Select
President's Council on Year 2000 Conversions	http://www.y2k.gov	Version
Federal CIO Council	http://cio.gov	Documents
Year 2000 Information Directory	http://www.itpolicy.gsa.gov	Year 2000 Directories
FDA--Biomedical Devices and Laboratory Equipment	http://www.fda.gov	Year 2000
Small Business Administration	http://www.sba.gov	Y2K
Year 2000 Compliant COTS Products	http://y2k.policyworks.gov	Year 2000 Information Directory
GSA Telecommunications Information	http://y2k.fts.gsa.gov	Year 2000
Year 2000 Status Vendor Product Database	http://globe.lmi.org/lmi_pbs/y2kproducts/	Continue