Honorable Franklin D. Raines
Director
Office of Management and Budget
Old Executive Office Building, Room 252
Washington, D.C. 20503

Dear Mr. Raines:

Enclosed is the USDA Quarterly Report for May 1998 regarding our efforts to resolve the Year 2000 problem in the department. We are committed to making all USDA systems compliant and have expanded our outreach efforts to increase awareness and ensure that program delivery will not be compromised.

Dr. Gregory Parham, our Year 2000 Program Executive Director, will be available to answer any questions that you or members of your staff may have. He may be reached on (202) 690-0048.

Sincerely,

RICHARD E. ROMINGER
Deputy Secretary

Enclosure

Status of Department of Agriculture Year 2000 Efforts
Quarterly Progress Report for May 1998

1. **Organizational Responsibilities.** ***Describe how your Department/Agency is organized to track progress in addressing the Year 2000 problem. (Provide the information for this item once with the initial report, and update it in future reports only if it changes.)***

The Department of Agriculture (USDA) has made minor changes in organizational responsibilities for addressing the Year 2000 problem since the Quarterly Report in February 1998. As previously stated, the Chief Information Officer (CIO) expanded the Year 2000 Program Office to include the establishment of the Senior Executive level position to provide overall leadership to the department. The mission of the Year 2000 Program Office is to ensure that USDA's mission critical systems are Year 2000 compliant by March 1999. The Year 2000 Program Office is providing specific guidance and program management leadership for the department on all aspects of USDA's Year 2000 program and are keeping the focus on meeting the March deadline.

The internal organization of the Program Office is divided into four functional areas, each area headed by a senior department representative working as the program manager. The functional areas are:

- Information Technology
- Telecommunications
- Vulnerable Systems and Processes
- Data and Cross Cutting Issues

Additionally, USDA has solicited the support of a Year 2000 Program and Project Management Support Contractor to evaluate and make recommendations on our overall Year 2000 program. The contractor has been tasked to review and make recommendations on our overall management approach, program execution, and to review our testing methodology, our IV&V process and our contingency plans.

Prior to obtaining contractor support, USDA has instituted regular monthly meetings of agency Senior Executive Sponsors to address policy issues related to Year 2000 conversion. The agency Year 2000 project Leaders also meet on a monthly basis to identify technical issues, share information and discuss potential solutions. The Vulnerable Systems and Processes Work Group meets twice a month to address issues with embedded systems in facilities, building, scientific and laboratory equipment. In addition to the regular meetings, each agency submits a monthly report on Year 2000 progress to the OCIO Year 2000 Program Office for review.

a. O<u>rganization</u>. ***Describe the responsible organizations for addressing the Year 2000 problem. Within your Department/Agency and provide an organizational chart.***

The Department of Agriculture (USDA) is comprised of seven mission areas which carry out program activities; and ten staff offices which provide program or administrative oversight and support.

The Secretary established a Year 2000 Program Office with Senior Executive Service leadership to manage Year 2000 issues Department-wide. The Chief Information Officer (CIO) and Program Executive have been assigned oversight responsibility for ensuring that all of USDA's mission-critical systems are Year 2000 compliant by the end of March, 1999. Each Agency Administrator has appointed a Year 2000 Senior Executive Sponsor for the overall management and implementation of the agency Year 2000 initiatives who reports directly to the Administrator. The Senior Executive Sponsors meet on a monthly basis to focus on the department wide Year 2000 effort and address cross cutting Year 2000 issues. Year 2000 is a critical element in the performance standard of the Senior Executive Sponsors and other appropriate agency program officials, ensuring responsibility as well as accountability.

The lines of communication and coordination are shown with dashed lines below in figure 1.

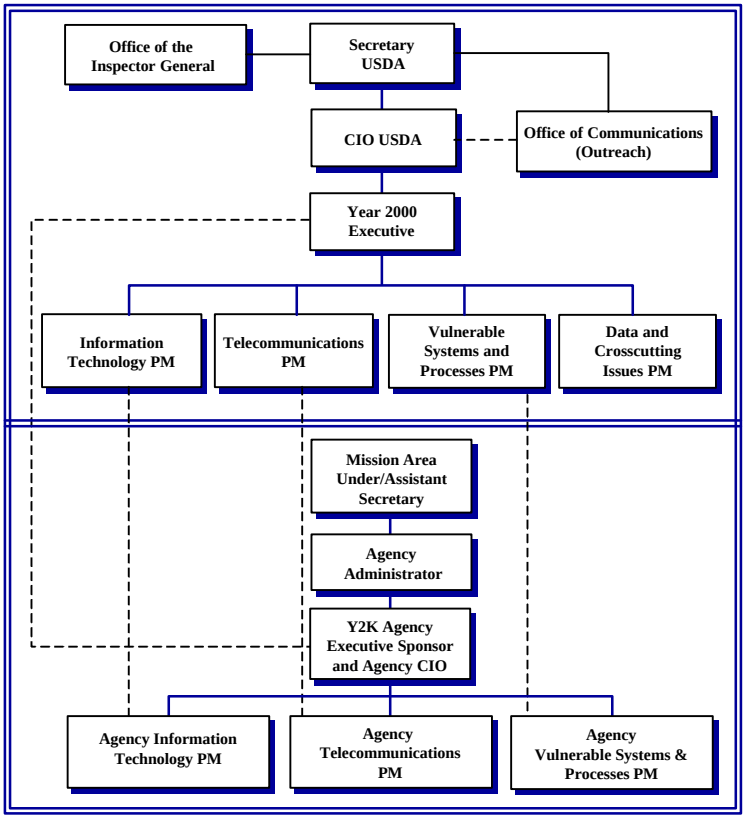

Figure 1. *Year 2000 Organization Chart*

b. **<u>Internal Accountability</u>.** ***Describe your Department/Agency's processes for assuring internal accountability of the responsible organizations. Include any quantitative measures used to track performance and other methods to determine whether the responsible organization falls behind schedule.***

The USDA Year 2000 Program Office tracks Year 2000 progress both descriptively and analytically. To assure compliance with established goals and milestones, agencies provide a monthly report that details progress. These reports are analyzed for current status of remediation efforts and cost projections for achieving compliance.

USDA has in place a moratorium on all new information technology purchases in excess of $25,000.00. Waivers are only granted for a mission-based emergency or to address a Year 2000 compliance issue. The Chief Information Officer (CIO) has sole signatory authority under the moratorium, which will remain in place throughout FY1998 and FY1999 to ensure that the Year 2000 is the Department's information technology priority.

Replacement Systems Tracking

A database was established in November 1997 to track performance and status of each mission critical system. Timeliness and budgets for each system are monitored as agencies repair, replace, or retire systems. The status of each agency system is available for review and analysis by the Program Office and the CIO to ensure internal accountability. The database was last updated in February 1998, but will continue to be updated on an ongoing basis beginning in May 1998, in order to more closely track and monitor the status of each individual system.

The Inspector General (IG) has been engaged in the process of monitoring agency progress on Year 2000. The IG completed reviews of the awareness and assessment phases in 7 agencies. Currently, the IG is conducting a review of the renovation phase of the year 2000 project. Agencies included in the review are Rural Development, Farm Service Agency, Risk Management Agency, Forest Service, Food and Nutrition Service, Agricultural Research Service, National Agricultural Statistics Service, National Information Technology Center, and the National Finance Center.

c. **<u>Oversight</u>.** ***Describe the management actions taken and by whom when a responsible organization falls behind schedule.***

No changes to report.

2. **<u>Status</u>.** ***Provide a report of the status of agency efforts to address the Year 2000 problem, which includes:***

a. <u>An agency-wide status of the total number of mission-critical systems</u>.

Total Number of Mission-Critical	Number Compliant	Number To Be Replaced	Number To Be Repaired	Number To Be Retired
Feb. Report[1] 1161	391	269	356	145
Current 1080	430	271	317	62
(-81)	(+39)	(+2)	(-39)	(-83)

The primary reason for the change between February and May is that the Farm Service Agency, the Forest Service, and the Risk Management Agency have retired systems. As mission-critical systems are retired they are dropped from the total number of mission critical systems list (per OMB memo 98-02). However, based on guidance from the IG and the GAO, we expect that the next quarterly report will show a drop in the total number of systems as agencies further refine the reporting of aggregate activities and elements in each operational system.

[Note 1: Based upon the recommendations of the Inspector General and the General Accounting Office, USDA has reduced the number of mission critical systems. This reduction reflects the aggregation of elements that were previously identified as separate systems. To permit a more accurate accounting of progress, the February numbers have been adjusted to reflect the reduction, as well. A detailed crosswalk is provided by attachment. Additional changes are anticipated as more agencies refine their reporting of systems. **]**

b. <u>The Status of the mission-critical systems being repaired</u>.

Information Technology	Assessment	Renovation	Validation	Implementation
Milestones	10/1997	09/1998	01/1999	03/1999
% Compliant	100%	56%	32%	31%

USDA has completed renovation of more than half of the mission critical systems and are better than 30% completed in our validation and implementation efforts. The trend is a positive one.

c. <u>Description of Progress</u>. ***Provide a narrative description of progress, including the following elements:***

(1) <u>Status of Mission Critical System</u>. ***fixing or replacing mission critical systems Provide a description of progress in.***

USDA continues to make steady progress in the remediation of mission critical systems. Currently, 430 of USDA's 1080 mission critical systems are Year 2000 compliant. Many of our agencies have contracted out in order to stay on schedule. As we increase the number of contracts, costs rise. Current estimates of cost to address year 2000 remediation have increased from 118 million dollars reported in February to 124 million dollars.

(2) <u>Status of Non-Mission Critical Systems</u>. ***Provide a description of progress in fixing non-mission critical systems, including measures that demonstrate that progress.***

USDA has begun to track non-mission critical systems. To date, agencies have identified 356 non-mission critical systems. One hundred ninety five (54 %) are compliant, 39 (11%) are scheduled for replacement, 69 (19%) for repair, and 56 (16%) for retirement. In addition, the Department is assessing and evaluating the impact of embedded chip technologies in buildings, facilities, scientific and laboratory equipment.

(3) <u>Data Exchanges</u>. ***Provide a description of the status of efforts to inventory all data exchanges with outside entities and the method for assuring that those organizations will be or have been contacted, particularly State governments.***

USDA has established a data exchange database containing over 8100 external federal, state, international, public and private data exchanges. USDA provided an electronic and paper copy of its state data exchanges to the General Services Administration for distribution to National Association of State Information Resources Executives. USDA contacted designated state agents to finalize the data exchange format and testing dates. To date, not all states have responded.

The Food and Nutrition Service (FNS) recently surveyed the Year 2000 readiness of the state systems that support its Food Stamp and Women, Infants and Children programs. FNS reported that,

- The states reported that their Food Stamp systems would be Year 2000 compliant by December 31, 1999.
- Five states reported that the systems supporting the Food Stamp Program were Year 2000 compliant.

- Eight states reported that their systems supporting the Food Stamp Program would be compliant after March 31, 1999.
- Twelve states reported that their systems supporting the WIC program would be compliant after March 31, 1999.
- One state plans to use their existing manual system supporting the WIC program until August 1, 2000
- One state did not report on the status of telecommunications to support the WIC program. However, the information is expected to be in the next report.
- Thirteen states reported that the systems supporting the WIC program were Year 2000 compliant.

The CIO will continue to work closely with FNS and the states to monitor progress and develop contingency plans, as necessary.

An example of the complexity of the interfaces and interchanges associated with Year 2000 conversion can be illustrated by the situation at the USDA National Finance Center (NFC). The NFC has six mission-critical systems, including a payroll/personnel system, which supports more than 450,000 federal employees. Renovation of the systems is on track to be completed in June 1998, validation of the systems in September 1998, and implementation of the compliant, repaired system in October 1998. However, the NFC receives and processes information from over 100 federal organizations and transmits it to the Department of the Treasury's Financial Management Service, which in turn has interfaces and exchanges with many banks. All of the data exchanges, from the originating agency to NFC, then to individual banking accounts, must be addressed and tested to ensure end-to-end functionality. This will not be a simple transaction.

(4) **<u>Contingency Planning</u>.** ***Provide a description of contingency planning activities, including any criteria used to decide for which systems contingency plans will be prepared and deadlines for when plans must be in place*.**

The USDA is reviewing the General Accounting Office exposure draft document "*Year 2000 Computing Crisis: Business Continuity and Contingency Planning.*" USDA has added additional program management support resources to develop guidelines based on the GAO document. The guidelines should be available in June 1998.

Priority will be placed on programs which affect individual health and safety, have a major economic impact, or affect large segments of the population

(5) <u>Other Year 2000 Implications</u>. *Provide a description of efforts to address the Year 2000 problem in other areas (e.g. facilities, biomedical and telecommunications systems)*.

(a) Vulnerable Systems and Processes (Buildings, facilities, personal property, scientific and laboratory equipment)

USDA has taken management action to ensure that all agency-owned and leased buildings, facilities, aircraft, scientific and laboratory equipment, personal property, and motor vehicles are Year 2000 compliant by March 1999.

Our Vulnerable Systems & Processes Work Committee has been active in developing guidelines and procedures for compliance efforts in this area. The approach and strategy for ensuring compliance in these areas are based on the GAO guidance for the five phases of remediation: awareness, assessment, validation, testing, implementation. A Vulnerable Systems and Processes Action Plan has been developed and implementation started. Our agencies are now required to report on their activities as part of their monthly report.

Our comprehensive inventory and assessment of vulnerable systems and processes, including buildings, facilities and equipment with embedded processors is scheduled for completion in May 1998. Agencies are collecting inventory data on their buildings and facilities nationwide to identify critical and non-critical systems that impact health, safety or protection of property. The inventory data will be used to track the system type, status, and cost of repair. Agencies with scientific and laboratory equipment are conducting assessments to identify the types of equipment, manufacturers, and Year 2000 compliance status. To date, USDA has identified over 39,000 buildings and facilities, over 38,000 vehicles and almost 400 aircraft (mostly loaned to states for firefighting purposes). While most of these will not be affected by the date change, they all must be assessed.

The elevators, security systems, fire alarms, and HVAC systems in the USDA Headquarters complex, which includes the Whitten Building, South Building, Cotton Annex, Auditors Building, and Beltsville Office Facility have been certified as compliant. These systems will be independently verified to ensure that there will be no negative impact on health and safety in the Headquarters complex. Additionally, the agency Administrative Services Council members have been asked to identify the “top five” mission critical buildings or facilities based on their potential impact on health and safety that will also be candidates for an independent verification and validation of impacted systems..

For the area of motor vehicles, personal property, and aircraft systems, we are working closely with the General Services Administration (GSA) and its network of committees and contractors to resolve compliance issues.

(b) Telecommunications

A major initiative is underway in USDA to inventory and assess the status of our telecommunications systems. It is scheduled for completion in July 1998. USDA has taken management action to ensure that the agency-owned voice and data network infrastructure critical to USDA's mission is Year 2000 compliant by March 1999.

The nature of the telecommunications infrastructure makes it imperative to address the problem on a Government-wide scale. Under the auspices of the CIO Council Committee on Year 2000, USDA management is working closely with other executive branch departments, and the vendor community to define the scope and develop solutions for the Year 2000 compliance requirement.

USDA has initiated a schedule for inventorying all of our telecommunications assets and for their remediation. The Year 2000 Program Office has developed a framework that provides for a step-by-step approach to the activities that must be accomplished to address the Year 2000 telecommunications problem. More than 3,700 network routers have been specifically identified, and several hundred will require hardware and software upgrades to be Year 2000 compliant. Cost estimates for upgrades are being developed in conjunction with the GSA and the telecommunications industry.

(6) Problems Affecting Progress

People. USDA, like other federal and non-federal organizations, has experienced a loss of skilled information technology employees though retirement, buy-outs and increased recruitment from the private sector. Several agencies have expressed particular concern that this loss of staff will affect their ability to meet Year 2000 deadlines. Specifically, Farm Services Agency (FSA) reports that it has lost 28 of 403 (7 percent) information technology staff in the first 6 months of FY98. Further, Forest Service (FS) reports that it has lost 12 information technology staff in the past 5 months. It has also lost contractors who have left for better paying positions.

Efforts at replacing these employees are complicated by our inability to compete with higher salaries being offered by private industry. Further, agencies are also experiencing some contracting delays as vendors find it increasingly difficult to bring on more contract employees without substantial increases in contract dollars.

In an effort to address this increasing shortage of information technology workers, USDA's Office of the Chief Information Officer (OCIO) and Office of Human Resources Management (OHRM) are working closely together to provide USDA managers with recruitment and retention alternatives and flexibilities.

In late April 1998, the Office of Personnel Management (OPM) delegated to USDA the authority to waive pay and retirement reductions for up to 100 re-employed military and civilian retirees hired to perform work related to Y2K. This will permit USDA to hire individuals with experience in programming languages in the legacy systems. On May 12, 1998, USDA's Director of OHRM approved compensation waivers for two former USDA employees who are needed to manage and administer a separate computer platform "time machine." This totally separate platform will assure that the production environments will advance system and data dates to the Year 2000 and beyond without causing any processing problems or delays in the production environments. These employees will be appointed to temporary positions, not to exceed 12 months, although, each appointment may be extended once, but only until March 31, 2000. USDA is the first federal agency to report granting a waiver.

OCIO and OHRM have also issued several explanatory memos to USDA Subcabinet Officials, Agency Heads, Agency CIOs and Mission Area Personnel Officers which outline management flexibilities available to more effectively recruit and retain IT professionals at USDA. These memos were also discussed with USDA's personnel community at the Human Resources Leadership Council and at the Employment Officers meeting.

OCIO is an active partner in the CIO Council's Education and Training Subcommittee, which is collaborating to confront these information technology workforce issues government-wide.

Availability of Information. As USDA focuses more intensively on embedded technologies and systems, uncertainties on the part of equipment manufacturers as to the Year 2000 compliance status of their products are emerging. This uncertainty generates a high level of risk in affected systems. USDA will continue to work with the Presidents' Year 2000 Council, the CIO Council and GSA to address this issue.

(7) **Government-wide Systems.** ***Provide a description of the status of the Year 2000 readiness of each government-wide system operated by the agency (e.g. GSA will report on FTS 2000)***

The system supporting the Thrift Savings Plan (TSP) is currently being renovated, with completion scheduled for June 1998. Validation of the system will follow, and implementation is scheduled for completion in October 1998.

The TSP was established by Public Law 99-335, the Federal Employees Retirement System Act (FERSA) of June 6, 1986, as amended. The TSP is a basic component of the Federal Employees Retirement System (FERS). The TSP is available to Federal and Postal employees, Members of Congress and certain Congressional employees, and other persons covered by the Civil Service Retirement System (CSRS) or the FERS.

(8) **Verification Efforts.** ***Describe how and to what extent internal performance reports, (i.e., compliance of systems repaired and replaced) are independently verified. Provide a brief description of activities to assure independent verification that systems are fixed and to assure that information reported is accurate.***

Internal reports are reviewed at each level in the agency and Department. This includes the project team leaders, agency's Senior Executive Sponsors, the Administrator, and Under and Assistant secretaries, as appropriate. The Senior Executive for each agency is responsible for verification of the accuracy of reports. When questions arise, the Year 2000 Program Office meets with the Senior Executive Sponsors, agency CIO's, and project leaders to clarify and resolve issues.

USDA has established that Year 2000 compliant systems must be able to correctly process dates before, on and after January 1, 2000; recognize Year 2000 as a leap year; accept, store, display and print the dates unambiguously; and process any logic using a date function. Additionally, the Year 2000 Program Office is establishing an independent validation and verification process to support departmental compliance.

An USDA wide mainframe testing environment is being established at the National Information Technology Center in Kansas City. This environment will consist of a Year 2000 compliant operating system logical partition. The test environment is expected to be fully operational in July 1998. Additionally, a separate mainframe test environment (time machine) has been established and is currently operational at the National Finance Center (NFC) in New Orleans. Testing began on NFC applications in April 1998.

(9) **Other Evidence of Progress**. ***Please include any additional information that demonstrates your agency's progress. This could include charts or graphs indicating actual progress against your agency's schedule, lists of mission critical systems with schedules, or any other presentations*.**

Outreach

USDA is reaching out to our customers in many ways. For the past several months, USDA officials have begun to include references on Year 2000. Briefings of public interest group in speeches to USDA customers, farm bureaus, rural utility companies, and non-profits on the dangers posed by the Year 2000 problem have been conducted.

As the Department moves forward in its efforts to reach out to the agriculture sector of the economy, USDA will also work to assist our rural communities on obtaining information relating to the Year 2000 problem. With the assistance of organizations such as the National Association of Counties (NACo) and the National League of Cities (NLC), the Department is preparing to inform rural communities of potential risks to health and safety, record keeping and government services, due to the Year 2000.

The information USDA compiles will be used to develop Year 2000 program materials for rapid and mass distribution through our field offices, the media, and our many partners in the agriculture sector. Current plans call for the development of a brochure, editorials, website, and public service announcements. Also, a satellite

conference will be held and beamed out to our field offices, the land-grant university system as well as any other businesses, local governments, or educational institutions that would like to view it. This conference will provide background information to assist rural communities farmers, small businesses, and families in their efforts to understand and fix any Year 2000 problems, which may confront them.

3 **Costs**. ***Report your estimates of Year 2000 information technology costs. Report totals in millions of dollars for FY 1996 through FY 2000. (For amounts under $10 million report to tenths of a million.)***

Fiscal Year	1996	1997	1998	1999	2000	Total
Cost	$4.2	$20.9	$62.0	$29.4	$7.5	$124.0

The change in estimates is based on an analysis of Year 2000 assessments, planning assumptions, recent decisions of program planning team, and accelerated deadlines.

USDA cost estimates may rise again, as testing proceeds and as estimates to achieve Year 2000 compliance for telecommunications systems and vulnerable systems are better understood.

4 **Exception Report on Systems**. ***Provide a brief status of work on each mission-critical system which is not Year 2000 compliant that is being either replaced and has fallen behind the agency's schedule by two months or more, or is being repaired and has fallen behind the agency's milestones by two months or more.***

One agency is experiencing some schedule slippage on 3 mission critical replacement systems. The impact is not yet clear.

Another agency has recently identified two systems scheduled for replacement in May and August 1999. The schedule for one of the systems is being reevaluated and is expected to be accelerated. The contingency plan for both systems is to make the current systems compliant by March 1999.

5 **<u>Systems scheduled for implementation after March 1999</u>**. ***Please include a list of those mission critical systems where repair or replacement cannot be implemented by the March 1999 deadline. The list should include the title of the system, a brief description of what the system does, the reason that the system cannot be implemented by the deadline, and when a contingency plan will be in place.***

Agency	**Title of System**	**Description**	**Reason**
NASS	Census of Agriculture	Census of Farms in Rural America	System not required until 2001

Attachment

Crosswalk of Change in USDA Baseline Systems

Total Number of Mission-Critical	Number Compliant	Number To Be Replaced	Number To Be Repaired	Number To Be Retired
USDA Feb. Report (baseline as submitted) 1319	539	261	372	147
USDA Feb. Report (baseline as revised) 1161	391	269	356	145
Change in baseline 158	148	8	16	2
Component agency (baseline as revised) 13	4	8	0	0
Component agency (baseline as reported in February) 171	152	0	16	2

One USDA component agency has reevaluated and redefined previously reported system elements, resulting in 158 fewer systems in the USDA baseline. The impact of the changes is illustrated in the table above.