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# *Senate Hearings*

*Before the Committee on Appropriations*

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## Department of Agriculture Proposed Computer Acquisition

*Fiscal Year 1976*

**94<sup>th</sup> CONGRESS, FIRST SESSION**

**SPECIAL HEARING**

Approved For Release 2002/11/16 : CIA-RDP84-00933R000300270001-1

**DEPARTMENT OF AGRICULTURE**  
**PROPOSED COMPUTER ACQUISITION**

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**HEARING**  
**BEFORE A**  
**SUBCOMMITTEE OF THE**  
**COMMITTEE ON APPROPRIATIONS**  
**UNITED STATES SENATE**  
**NINETY-FOURTH CONGRESS**  
**FIRST SESSION**

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Printed for the use of the Committee on Appropriations

**Special Hearing**



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(II)

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**DEPARTMENT OF AGRICULTURE AND RELATED  
AGENCIES APPROPRIATIONS FOR FISCAL YEAR  
1976**

WEDNESDAY, JUNE 18, 1975

U.S. SENATE,  
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,  
*Washington, D.C.*

The subcommittee met at 10:05 a.m., in room 1224, Everett McKinley Dirksen Office Building, Hon. Gale W. McGee (chairman) presiding.

Present: Senators McGee, Fong, Young and Bellmon.

**DEPARTMENT OF AGRICULTURE**

**AUTOMATED DATA PROCESSING AND COMPUTER EQUIPMENT**

**STATEMENT OF J. P. BOLDOC, DEPUTY ASSISTANT SECRETARY  
FOR ADMINISTRATION**

**ACCOMPANIED BY:**

**FRANK B. ELLIOTT, ADMINISTRATOR, FARMERS HOME AD-  
MINISTRATION, USDA**

**H. W. MEETZE, DIRECTOR, OFFICE OF AUTOMATED DATA  
SYSTEMS, USDA**

**OPENING REMARKS BY CHAIRMAN**

Senator McGEE. This hearing will come to order.

We are here to investigate Department of Agriculture plans to acquire substantial amounts of automatic data processing equipment. The proposal has been under active investigation by the General Accounting Office for the past several months.

**GAO REPORT CRITICAL OF WDA**

On June 3, GAO issued its report entitled, "Improved Planning." This report stressed that improved planning is a must before a Department-wide automatic data processing system is acquired. The report was severely critical of the Department.

It alleges that sufficient efforts weren't made to survey and examine the scope of Department ADP and computer needs before issuing a request for the proposal.

In the opinion of the GAO, the Department went forward without knowing its specific needs and without adequately considering the communications problem involved in such acquisition.

Thus, based on the indepth findings of the GAO, the suggestion was simple, but to the point. That is, GAO says procurement should be cancelled forthwith, pending corrections, adjustments, or filling in what was not adequately prepared.

The Department, in responding to the GAO, agrees with many of the findings. But it takes exception to the conclusion, for obvious reasons, since they already had reached their own conclusion. The Department apparently feels that the procurements should be allowed to proceed and adjustments could be made as they go along.

The General Services Administration which, in effect, is operating as a contract agency for the Department in the acquisition of this equipment, generally agrees that the procurement should be kept alive, pending a resolution of the needs.

#### ESTIMATED COSTS

But that is about as far as the agreement seems to go. It has become the business of this subcommittee, because the costs anticipated are substantial ones.

This money will have to come from you-know-where. That is the reason for our hearings this morning. Estimates of the cost of this proposal run around the \$400 million mark, total for the next 7 or 8 years. Complications flowing from that expenditure add to the problem.

#### IMPLICATIONS FOR THE PRIVATE SECTOR

The matter also is not without its importance to the private sector. Private industry has already expended considerable amounts of time and money in responding to the request for bids.

If the procurement is cancelled, as recommended by the GAO, bidders would stand to lose considerable amounts of money already committed.

This adds a complicated dimension to the question that this committee must consider.

I am presuming at the outset of these hearings that all of the interested and concerned parties are at least familiar with the GAO report. That is where we are going to start. We are starting with the assumption that this hasn't just been discovered.

To assist in the consideration of this matter, the GAO report will be entered in the record at this point.

[The report follows.]

COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-146864

*Date*

To the President of the Senate and the  
Speaker of the House of Representatives

This report gives our reasons for recommending  
cancellation of a planned procurement of automatic data  
processing equipment for the Department of Agriculture.

We made our review pursuant to the Budget and  
Accounting Act, 1921 (31 U.S.C. 53), and the Accounting  
and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Secretary  
of Agriculture and to the Administrator of General Services.

*James B. Heath*

Comptroller General  
of the United States

COMPTROLLER GENERAL'S  
REPORT TO THE CONGRESS

IMPROVED PLANNING--A MUST  
BEFORE A DEPARTMENT-WIDE  
AUTOMATIC DATA PROCESSING SYSTEM  
IS ACQUIRED FOR THE  
DEPARTMENT OF AGRICULTURE

D I G E S T

WHY THE REVIEW WAS MADE

Congressman John E. Moss and former Senator Sam J. Ervin, Jr., requested that GAO review all circumstances surrounding a proposed computer network, known as FEDNET, with emphasis on potential invasion of privacy.

FINDINGS AND CONCLUSIONS

In February 1974 the General Services Administration released a request for proposals to industry to provide (1) automatic data processing equipment for use at one General Services center and at four Department of Agriculture centers and (2) a data communications network that eventually would have linked the computers with several thousand terminals throughout the country.

When the Congress learned of the project, there was widespread concern because the Congress had not been fully informed of plans for a project of its size and because it could pose a serious threat to the privacy of individuals, particularly since such a network might be expanded to link all Government computers.

As a result, the request for proposals was revised to eliminate the data communications network and the automatic data processing equipment for the General Services' center. The revised request provides for equipment for four Agriculture centers, with equipment for a fifth center optional. For the four



centers, the total cost of the project, including \$106 million for equipment and software and operating costs over an 8-year period, is estimated at \$398 million. (See pp. 2 and 18.)

System planning studies needed

In December 1970 the Secretary of Agriculture approved the following concepts to achieve effective use of automatic data processing resources.

- Management of all Agriculture's data processing resources by a central office.
- Development of an overall automatic data processing plan.
- Large-scale, regional computer centers with maximum use of terminals for remote use of computers. (See p. 4.)

In April 1971 a task force recommended consolidating automatic data processing resources and identified actions needed to develop the overall automatic data processing plan. (See p. 4.)

In February 1974 when General Services released the request for proposals covering both Agriculture's and General Services' equipment requirements, Agriculture had not developed the detailed plans or made the studies that should have preceded procurement. (See p. 6.)

Determine user requirements before starting procurement

Agriculture had not determined the data processing and communications requirements for all of its agencies. The data processing requirements used to justify the February 1974 request for proposals were not representative of Department-wide needs because they were developed primarily from the workload analysis of only one Agriculture agency--one of the largest of 29 agencies and users.

There was no basis for designing an optimum communications network because agency users' locations and communications needs had not been identified. A complete accumulation and analysis of user requirements before procurement is imperative in view of the size, complexity, and eventual cost of the project. (See pp. 7 and 10.)

Consider data security requirements

Agriculture had not adequately considered security requirements that would reasonably protect personal or other sensitive information from unauthorized access. Agriculture could not develop realistic security specifications for the request for proposals because it had not made an analysis of all users' sensitive and personal data. Such an analysis is a prerequisite to any determinations of cost-effective methods of providing acceptable levels of security. (See p. 13.)

Although Agriculture is now making a survey of its agency requirements for data processing and communications, its survey questions are not aimed at producing the types of information needed to reasonably protect personal and sensitive data. (See p. 15.)

Compare costs for proposed and existing systems and for alternative designs

Agriculture did not make the economic studies required by Government regulations as a basis for evaluating a proposed project's benefits or the cost implications of alternative designs. (See p. 17.)

Agriculture officials told GAO that the project had been economically justified on the basis that the estimated overall cost for acquiring, preparing, and operating the proposed consolidation of installations and integration of data systems was less than what the overall cost would have been if each Agriculture agency had been permitted to acquire and operate its own system. GAO believes that this justification is not valid,

mainly because it did not compare costs for existing and proposed systems and for alternative system designs. (See p. 17.)

In January 1973 Agriculture decided on the locations for four departmental centers. Three centers already existed and the fourth was in the planning stage. There were no systems or economic studies made for considering alternative numbers of centers or locations. Consequently there was no consideration of the potential savings if only one, two, or three centers were established or of optimum locations for the centers. (See p. 18.)

#### Conclusions

GAO recognizes that Agriculture could expect economies and efficiencies to result from (1) consolidating and integrating data processing services Department-wide and (2) replacing a collection of heterogeneous second- and third-generation equipment. At this time, however, the request for proposals is not based on the required studies and analyses. As a result there are unanswered questions concerning the number and location of sites, the data processing equipment configurations, interfaces with communications equipment, and the privacy and security considerations. (See p. 19.)

#### RECOMMENDATIONS

The Secretary of Agriculture should:

- Advise General Services to cancel the planned procurement of automatic data processing equipment.
- Prepare a consolidation and integration plan for the proposed system.
- Complete the studies of Agriculture data processing and communication requirements, network and configuration analysis, security and privacy requirements, and economic factors.

--After completion and comparative analysis of the plan and studies, select, if warranted, the best alternative and prepare a new request for proposals based on established requirements.

AGENCY ACTIONS AND UNRESOLVED ISSUES

Agriculture acknowledged that data processing and communications requirements of all users had not been determined when the request for proposals was released in February 1974; however, it thought that the pending procurement of equipment should not be canceled until a survey of such requirements, begun in October 1974, is completed in May 1975. Agriculture says that if the survey results indicate that the procurement is not justified, it will be canceled. (See p. 20.)

✓ Agriculture's comments indicate that it is either abandoning or deferring its stated objectives--consolidating computer activity at some 47 locations into 4 centers, integrating data systems, and maximizing use of terminals for remote computer use. If such is the case, GAO still believes that the procurement should be canceled because, according to Agriculture's consulting firm, existing equipment at three departmental centers that the firm visited was adequate, whereas equipment meeting the requirements of the request for proposals would provide considerably more computer power than Agriculture needs. (See p. 21.)

If Agriculture is merely deferring its stated objectives to the near future, a complete communications study, including network analysis and configuration, has to be made before any data processing equipment is procured, to insure its effective use. Since the purpose of such a study, which would involve a considerable amount of time, is to tailor the communications system to users' needs, it could not be made until after all user requirements have been determined. GAO believes that all required studies should be made. (See p. 22.)

General Services agrees that no contract award should be made until Agriculture has completed all the studies GAO noted and has taken the requisite actions, including obtaining General Services' approval of Agriculture's communications plans. Although General Services feels that industry should be advised of the possible cancellation, it believes that the procurement should not be canceled at this time because of the large investment by industry and the Government. (See p. 22.)

General Service's suggestion that Agriculture not award a contract until General Services has approved the communications plans emphasizes the importance of completing studies to determine the least costly alternatives before starting procurement. In GAO's opinion, Agriculture's noncompliance with the regulations on matters that could have a great impact on a system's requirements is a good justification for General Services' canceling the procurement. (See p. 23.)

MATTERS FOR CONSIDERATION BY THE CONGRESS

The House Committee on Appropriations directed Agriculture to keep the Committee fully informed of the progress and proposals for the proposed computer system and to obtain the Committee's approval before obligating any additional funds for this system. The information in this report should also be useful to other committees and Members of Congress concerned with individual privacy safeguards and efficient and economical automatic data processing operations.

CHAPTER 1

INTRODUCTION

In response to requests on May 15, 1974, from Congressman John E. Moss and on May 22, 1974, from former Senator Sam J. Ervin, Jr., then the Chairman of the Subcommittee on Constitutional Rights, Senate Committee on the Judiciary, GAO has been reviewing circumstances surrounding a joint General Services Administration (GSA) and U.S. Department of Agriculture (USDA) computer acquisition project, referred to as the Federal Information Network (FEDNET). 1/

In 1965 Public Law 89-306 made GSA responsible for the economic and efficient acquisition, utilization, and maintenance of the Government's general-purpose automatic data processing (ADP) equipment. The law reiterated the existing responsibility of the Office of Management and Budget (OMB) for fiscal and policy control over all aspects of ADP management. OMB had previously issued policies and guidelines, in the form of circulars and bulletins, on acquiring and using ADP equipment and services. The law also provided for the National Bureau of Standards, Department of Commerce, to retain responsibility for developing technical standards and coordinating the Government's ADP research efforts. In May 1973 Executive Order 11717 transferred policy responsibilities to GSA, leaving OMB responsible for fiscal control and general oversight.

One of the law's objectives was for GSA to be the sole purchaser of the Government's general-purpose ADP equipment, to enable it to obtain quantity discounts; however, pending attaining that objective, GSA was authorized to delegate procurement authority to other Federal agencies. GSA issued Federal Property Management Regulations on the administrative and procurement procedures for agencies to follow.

When GSA receives an agency request for equipment procurement, it can elect to (1) delegate the procurement authority, (2) participate with the agency in the procurement, or (3) procure the equipment for the agency. The law prohibits GSA from interfering with agency determinations of ADP equipment requirements, including developing specifications and selecting the types and configurations of equipment needed.

In April 1973, USDA requested authority to procure ADP equipment for four centers (with the option to equip a fifth center). At that time GSA was planning to acquire a large-scale computer system for one of its Federal Data Processing Centers so that operations at its centers could be consolidated. GSA's planned procurement involved a data communications network for remote terminal use, but the proposed USDA procurement did not.

---

1/An acronym first used by GSA in 1973 for a proposed nationwide computer network for all Federal agencies.

Because of the similarity in the procurement objectives of the two agencies and because of the potential savings through quantity discounts, USDA proposed a joint procurement. During negotiations GSA agreed to use USDA's request for proposals (RFP) for ADP equipment, including the benchmark, <sup>1/</sup> and USDA agreed to use GSA's RFP for the data communications network. On February 28, 1974, GSA released the RFP for the joint procurement to industry.

In April and May 1974 widespread concern was expressed in the Congress and elsewhere because of implications that FEDNET could be expanded to link all modern computers in the Government and could pose a serious threat to the privacy of all individuals involved in any Government operation or program. Some Members of Congress interpreted the joint procurement as another attempt to establish a national data center, a concept the Congress rejected in 1968 because of the privacy issue. The Congress was also critical because GSA had not kept the Congress fully informed of plans for a project as large as FEDNET.

Due to congressional opposition, the RFP was revised in July 1974 to eliminate the data communications network and ADP equipment for the GSA center. The closing date for contractor proposals was November 29, 1974. GSA is still handling the procurement for USDA, and the target date for contract award is mid-June 1975. (See app. III for a chronology of the USDA project.)

The Privacy Act of 1974 (Public Law 93-579), approved December 31, 1974, provides for protecting the privacy of individuals identified in Federal agencies' information systems by regulating the agencies' collection, maintenance, use, and dissemination of information. The law establishes requirements as to the types of information that Federal agencies can maintain, the rights of the individuals who are the subject of such information, how such information can be used and disclosed, the accounting for disclosures, and safeguards to insure information security and confidentiality. USDA's information systems include personal information on its employees as well as on farmers' incomes and financial positions.

Because of the impending procurement for USDA and because the proposed procurement for GSA has been withdrawn, our initial effort was directed primarily to the need and determination of requirements for USDA's part of the project. We are continuing our review, and in a later report we plan to provide information on actions that Federal agencies should take to protect personal and other sensitive data while fostering the proper use of data processing networks to achieve economic benefits and operational efficiency.

<sup>1/</sup>The vendor's live test demonstration that his equipment can meet performance specifications.

CHAPTER 2

SYSTEM PLANS AND STUDIES NEEDED BEFORE CONSOLIDATING ADP

INSTALLATIONS AND INTEGRATING EXISTING SYSTEMS

In implementing its objective to consolidate ADP installations and to integrate its agencies' data systems, USDA started procuring equipment before developing the system plans or making the analytical studies Government policies and regulations required. Such plans and studies are needed to insure that ADP equipment acquired meets the needs of all users in the most efficient and economical manner possible.

USDA administrative regulations, issued in April 1971, recognize the provisions of OMB Circular A-54 (superseded by Federal Management Circular 74-5, July 30, 1974) and Bulletin 60-6 concerning the planning and studies that should precede selecting and acquiring equipment. The regulations identify the essential elements of a systems study and require that the study be documented to (1) insure that a proper study has been made, (2) afford an opportunity for reviewing levels to evaluate the recommendations and resulting decisions, and (3) provide a basis for the future evaluation of the system in terms of original expectations.

In December 1970 a USDA staff study concluded that USDA's ADP resources were not being used effectively. The study identified 43 USDA computer systems in 26 cities and 67 new computers planned for installation by 1975. The staff recommended that the Secretary of Agriculture approve the following concepts, to avoid duplication and waste of resources.

1. Management of all of USDA's data processing resources by a central office.
2. Development of an overall ADP plan.
3. Large-scale, regional computer centers with maximum use of terminals for remote use of the computers.

The Secretary accepted the concepts and formed a task force to develop implementation policies and objectives.

The task force report, issued in April 1971, recommended consolidating ADP resources and identified the actions needed to develop the overall ADP plan. Some of the actions recommended were:

- Analyze USDA's data processing needs after establishing a catalog of data systems, existing and potential computing and data communications needs, and management information requirements.
- Identify agencies' use of common data and applications and conceptually design an integrated information system and computer network.



The task force recommended that, to insure that departmental control of ADP resources would meet individual agency needs, the central office acquire detailed knowledge of all of USDA agencies' missions, plans, and applications.

After the Secretary approved the April report, the Assistant Secretary for Administration formed new task forces, in July 1971, to assist in developing the overall ADP plan and accomplishing other actions recommended in the report.

A systems study task force was to systematically assess each agency's data processing program--the information received, the source and method of collecting the information, the type of processing, the output of results from processing, who got the results, and how the results were used. USDA officials were unable to provide documentation of such assessment.

The Secretary established the Office of Information Systems in March 1972 (changed to Office of Automated Data Systems (ADS) in January 1974) and made it responsible for managing all ADP resources and for developing the integrated, USDA-wide information system. Although ADS gradually assumed management control of the departmental computer centers, it did not analyze USDA agencies' data processing requirements or carry out the other actions previously identified as prerequisites to an overall ADP plan.

In November 1973 USDA released an RFP for a study to evaluate (1) the organization and management of ADP functions, (2) existing ADP operations in the light of user requirements, and (3) plans for consolidating ADP resources, including communication requirements. A contract was awarded to American Management Systems, Inc., (AMS) on January 8, 1974.

AMS later issued four interim reports covering its review of (1) the proposed ADP equipment RFP, (2) budgeting and control procedures within ADS and USDA, (3) the ADS organizational structure, and (4) USDA agency ADP requirements. AMS issued its final report on May 30, 1974. The reports listed several areas of concern involving:

1. Adequacy of USDA's planning and resources for conversion to the new equipment.
2. Accuracy of USDA's costing and sizing estimates.
3. Procuring too much computer power.
4. Lack of specific computer center plans.
5. Lack of detailed data on agency ADP workloads.
6. Capability of ADS to support the procurement from the viewpoint of organizational structure, technical expertise, planning, and staffing.

In its first interim report, AMS noted that it was assisting ADS in developing a single, comprehensive ADP plan because none had been prepared. On June 26, 1974, the AMS contract was amended to include assisting USDA in planning, systems analysis, and general management of ADP operations. One of AMS's new tasks was to define requirements and to develop specifications for the communications systems. It should be noted that this action was taken 4 months after the equipment RFP was released to industry.

The concepts the Secretary approved in 1970 and the planning actions recommended in the 1971 report provided, in our opinion, a sound basis for the efficient and economical procurement and use of ADP and communications equipment. But these goals have not been accomplished because the recommended actions were not taken.

USDA did not develop the detailed plans or make the studies that should have preceded procurement action. ADS, the central office for the USDA-wide information system, did not gather the information about management information requirements and agencies' computing and data communication needs.

### CHAPTER 3

#### DETERMINATION OF

#### DATA PROCESSING AND COMMUNICATIONS REQUIREMENTS

#### NEEDED BEFORE EQUIPMENT IS ACQUIRED

USDA initiated action to acquire equipment for four departmental computer centers even though it had not determined the data processing and communications requirements for all of its agencies. A complete accumulation and analysis of user requirements before procurement is imperative in view of the size, complexity, and eventual cost of the project.

According to the 1971 task force report, one prerequisite of the overall ADP plan was determining data processing requirements. The report also cited the need for special emphasis on data communications because such communications were essential for

- providing access to computer facilities from remote locations,
- providing access to data files,
- balancing computer load,
- providing computer power to dispersed activities,
- acquiring data, and

--contributing to information exchange by people and computers.

DATA PROCESSING REQUIREMENTS

Data processing requirements used to justify the RFP released to industry in February 1974 are not representative of total USDA needs because they were developed primarily from the workload analysis prepared by only one USDA agency--the Agricultural Stabilization and Conservation Service (ASCS), one of the largest of the 29 user groups at USDA. This occurred even though the central office, according to the mandate of the approved 1971 task force report (see p. 4), was to acquire detailed knowledge of all USDA agencies' data processing applications and conceptually design an integrated departmental information system.

Following are some of the items identified in USDA's administrative regulations, which implement OMB's policies and guidelines, for inclusion in the systems study.

- Description of the end products to be produced by the system and the value of their intended use.
- Description of the data sources and major data files used in the system.
- Frequency and need for updating the major data files or producing end products.
- Volumes of data involved.
- Implementation schedule.
- ADP equipment specifications, if any, such as required delivery dates, need for compatibility, and performance standards.

The following procurement-oriented actions, instead of the actions recommended in the 1971 task force report and USDA administrative regulations, were taken.

In addition to establishing the systems study task force to assess each agency's program (see p. 5), the Assistant Secretary for Administration established a procurement task force in July 1971 to gather data on interim agency requirements and to write the necessary procurement documents for acquiring departmental computer equipment for use until the overall ADP plan was completed. The task force was given 5 months to complete its study.

In August 1971 the task force reported that it had identified five possible approaches for determining agency requirements and specifications and requested that one approach be selected so that the task force could continue its work. Each approach--ranging from a 100-percent survey of agency requirements (highest degree of reliability) to a 10-percent sample--was listed and compared for such factors

as the risk in obtaining reliable requirements data, time and costs, and probability of GSA's approval.

During the review process, the Acting Director of ADS suggested a sixth approach--brand name or equal--because future workload requirements were vague or unknown. The brand-name-or-equal approach was considered (1) easier for specifying known computer characteristics in an RFP and (2) the most expeditious--requiring 4 to 6 months for developing an RFP.

Although the Assistant Secretary approved using the brand-name-or-equal approach, he suggested that the manufacturer's name and model number be omitted and that equipment performance characteristics (such as core size and processing speeds) be used to insure getting the specific equipment desired without mentioning the manufacturer's name.

In February 1973 USDA informally asked GSA's opinion and reaction on a proposal to acquire, on a sole-source basis, IBM 370-168 systems for four departmental centers. In March 1973 GSA informally told USDA that the sole-source proposal was unjustified and suggested that USDA prepare an RFP for a competitive procurement.

On April 1, 1973, 18 employees from ASCS's ADP Division, including the project manager, were transferred to ADS to assist in developing the RFP which was to be finished in draft form 1 month later. We were told that, in view of the short time allowed for the work and the absence of requirements for all agencies, ADS used ASCS's November 1972 RFP as the basis for the departmental RFP.

According to the project records and our discussions with USDA officials, ASCS was the only USDA agency that had completed a thorough systems study. ASCS's RFP--which USDA did not approve--had called for a large-scale regional computer and a nationwide telecommunications network, similar to the 1970 concept the Secretary approved. (See p. 4.) ADS increased the number of computer centers in ASCS's RFP from one to four and expanded the workload requirements stated by ASCS so that the four centers would service all USDA users. There was no documentation showing ADS's rationale or methods for the modifications to the ASCS RFP.

On April 12, 1973, USDA formally requested that GSA authorize USDA to procure computer systems for the four departmental centers. The request pointed out that USDA was then operating 76 computers at 47 locations and that an objective of the proposed procurement was to reduce the number of data processing installations. USDA also advised GSA that the Air Force's Automatic Data Processing Equipment Selection Office was helping to write specifications and prepare recommendations to the final source selection authority.

Following submission of the request, according to the former director of ADS, USDA proposed a joint procurement with GSA because GSA was planning to consolidate its 12 Federal Data Processing Centers by upgrading equipment at one Center. GSA's plans included acquisition of a data communications network and computer equipment, whereas the USDA RFP was for only computer equipment, including peripheral equipment used for hookup to communications facilities.

During negotiations USDA's RFP was modified to accommodate GSA's requirements. Conversely, GSA's data communications RFP was modified to accommodate USDA's communications requirements. The RFP covering ADP equipment and the data communications network was released to industry on February 28, 1974.

GSA later deleted from the RFP the data communications network and equipment for a GSA center as a result of congressional concern over (1) how GSA had handled the project--not fully informing the Congress and giving inadequate attention to the potential for invasion of privacy--and (2) the possibility that the data communications network could eventually be expanded to establish a national data center linking all Federal agencies.

GSA is still handling the procurement for USDA. Proposals were due from vendors by November 29, 1974. We were informed that three proposals were received. The target date for contract award is mid-June 1975.

#### COMMUNICATIONS REQUIREMENTS

USDA has no basis for determining the optimum ADP system design and location--to insure efficient use of the new equipment--because it did not make a communications study to identify the types and volume of data, location of agency users, and estimated costs.

Subpart 101-32.11 of the Federal Property Management Regulations states that a data communications study should be made before a decision on the need or types of ADP equipment to be acquired is reached, if the proposed ADP system includes any of the following.

- A real-time or an on-line computer system.
- A time-sharing system.
- Remote locations that provide input and obtain output in a time frame that cannot be satisfied by nonelectronic communications means.

--Current and usable information that must be accessed with a high degree of immediacy by many users.

--Two or more computers, not located at the same site, with a requirement for backup, load balancing, or data transfer between them.

All of these conditions apply to the proposed departmental ADP system. Specifically, the proposed consolidation project is to have four computer installations with (1) several thousand remote terminals, nationwide, to service users in 29 USDA agencies and (2) integrated data systems on line with immediate access by users.

Subpart 101-32.11 states also that a data communications study should include a detailed analysis indicating (1) the additional equipment required, (2) the type and number of communications lines, (3) the impact on the format of the data and data banks, codes to be used, and programing required, and (4) the important elements of cost.

It is USDA's plan, however, to first acquire the large-scale ADP equipment and then--sometime in the future--gather user requirements, design a network, and integrate it with the ADP equipment. This approach is not consistent with the regulations which require that ADP and communications systems be planned in a coordinated and integrated process.

Apparently USDA has not recognized that efficient and economical acquisition and use of an ADP network is directly dependent on how the communications system is tailored to meet agency needs. (This point is discussed further in app. IV.)

#### CURRENT ANALYSIS OF REQUIREMENTS

In one of its interim reports to USDA, AMS concluded that it could not verify that the agencies' requirements would be satisfied by the RFP specifications. Consequently, in October 1974 ADS began an ADP systems inventory by sending four one-page survey forms to USDA agencies. The forms, to be returned by February 17, April 15, and September 15, 1975, inquire about existing and proposed systems and applications, operating environment, frequency of use, file activity, and conversion requirements.

One survey form asks agencies to identify the computer center where their jobs are being processed and to indicate their preference for future processing from the four locations selected for the new equipment. It should be noted that gathering user requirements is the preliminary step in the system analysis and design process. After the forms are returned, analyses and further studies will be required. Such studies should, in our opinion, include a communications study and network analysis to determine the optimum network size and design.

It should also be noted that vendors' equipment proposals have been received, that benchmark tests have been completed, and that contract award is planned for mid-June 1975. It seems to us, therefore, that the survey and analyses initiated in October 1974 can have only a limited impact upon the already established specifications of the current procurement action.

#### CHAPTER 4

##### PRIVACY AND SECURITY REQUIREMENTS NEED ATTENTION

USDA has not adequately considered security requirements necessary to reasonably protect personal or other sensitive information from unauthorized access. Although such inadequate consideration may not have been uncommon in Federal agencies at the time the equipment RFP was released in February 1974, later expressions of congressional concern for the protection of personal privacy emphasized the need for greater consideration. Nevertheless, USDA's requests for its agencies' requirements in October 1974 showed that privacy and security requirements were still not being adequately considered.

##### RFP SECURITY PROVISIONS

Although the RFP specifies certain security features, USDA did not make the studies and analyses necessary to determine its security requirements. Such studies would have provided such information as

- user data to be placed on the system,
- data confidentiality and sensitivity,
- the most likely sources of threat to the data,
- safeguards available and their corresponding cost, and
- the most cost-effective mix of security safeguards which would satisfy user needs.

A system's hardware and software provide the technical features necessary to achieve the level of security established by an analysis of users' security requirements. Since USDA did not make the studies necessary to develop the security requirements, it could not have an adequate basis for developing realistic security specifications for the RFP.

The security specifications in the RFP merely recite the security features whose presence in a system is no assurance that the system is or can be made suitable for

processing sensitive or personal data. <sup>1/</sup> On the contrary, a number of the specifications describe operating controls that support a particular concept and type of operation that has been repeatedly shown, on contemporary systems, to inadequately protect data from unauthorized access by a determined user. The term "determined user" refers to an individual who has programming knowledge and who is willing to spend time and money to compromise, change, or destroy the data.

The state of the art in computer security is such that absolute security has not been achieved in a multiuser time-sharing environment. In fact, security against a determined perpetrator cannot be absolutely insured in any environment without complete physical isolation. Decisions must therefore be made on the degree of security which would be adequate in relation to the value of personal and sensitive information to potential perpetrators, to data subjects, and to the agencies holding the information.

There are a number of methods that could be employed, depending on the degree of sensitivity of the data that requires protection. Which method or combination of methods would be appropriate cannot be determined until the sensitive or personal data requiring processing is identified. Once this is done, the most cost-effective method of providing an acceptable level of security to that data can be determined.

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1/ The RFP specified such security features as:

a. User and file password. An identification technique which permits the system to recognize an authorized user before giving access to the systems or restricted data.

b. Privileged instructions. Those instructions that can be executed only by computer programs that have such control functions as scheduling and allocating the system's resources (the operating system) and not by unprivileged users.

c. Hardware memory read/write protection. A feature to prevent inadvertent data or program erasure and to protect data integrity.

d. Audit trail. A record in sufficient detail to determine the cause or originator of all unauthorized attempts to look at or change the data base.



To provide the degree of protection considered appropriate for sensitive or personal data, it may be necessary, in some cases, to operate one or more dedicated systems; 1/ use scheduled, exclusive-use processing; 2/ use demonstrated, logical isolation techniques; 3/ or use a combination of these and other techniques.

If one of the alternatives to a dedicated system for handling sensitive and personal data is considered the appropriate means of providing secure processing, the network interface and the type of secure communications required may change considerably. It appears that some of USDA's data that will require protection must be accessible to agency offices, nationwide. The telecommunications network design, therefore, is likely to be affected by the need to provide some form of communications security.

The above observations illustrate that security requirements have far-reaching effects on the hardware, operating system, communications network, and general design of the type of ADP service center best suited to meet the needs of USDA as a whole. The best approach to providing an adequately secure computing environment cannot be established until the volume, frequency, and other aspects of the requirements for secure data processing are known.

#### RECENT ACTIONS

In a July 1974 letter to USDA's Assistant Secretary for Administration, OMB referred to extensive discussions among OMB, USDA, GSA, and the Office of Telecommunications Policy and to the general consensus:

- 1/ A system reserved exclusively for processing data for a single user or function.
- 2/ Establishes scheduled periods when a multiuser computer is used exclusively for processing data for a single user or function.
- 3/ Advanced techniques, such as a virtual machine system, which make available to each user an interface to the computer that is functionally equivalent to a separate machine, with no restrictions on the type or category of instructions that can be executed. This is contrasted with the conventional operating system which, to protect itself, is designed to restrict the user from executing privileged instructions.

"\* \* \* that a detailed analysis of all individually identifiable data which will be stored in these computers be made and plans for safeguarding any such data in the system be developed prior to the award of the contract."

As previously noted, in October 1974 USDA started an ADP systems survey to obtain information on existing and planned data processing applications for the departmental computer centers. (See p. 11.) This survey included USDA's first effort to obtain information on its security requirements. Yet it inadequately recognized the security problem, notwithstanding the strong expressions of congressional concern for the protection of privacy after release of the RFP in February 1974 and the July 1974 letter from OMB. Only the following two questions relating to privacy and security were asked.

1. "Any security considerations? Yes-No."
2. "Any personal/corporate data in this file? Yes-No."

Although formal Government-wide policies and regulations for safeguarding personal privacy have not been issued, the National Bureau of Standards has distributed various publications on computer security. <sup>1/</sup> For example, the Bureau's Technical Note 809, "Government Looks at Privacy and Security in Computer Systems," issued in February 1974, identified problems related to safeguarding information and some solutions to minimize the risks, including an outline of a privacy action plan developed during a joint study by the State of Illinois and International Business Machines Corporation.

The privacy action plan outline included steps that would determine system requirements, analyze confidentiality, and assess risks. These publications were available to USDA, but USDA did not recognize the suggestions contained therein in preparing the ADP application systems survey.

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<sup>1/</sup> The National Bureau of Standards is circulating for comment a draft of a document entitled "Computer Security Guidelines for Implementing the Privacy Act of 1974" (see p. 2), dated April 15, 1975. This document provides guidance on using technical procedures for safeguarding personal data in automated information systems.

CHAPTER 5

ECONOMIC STUDIES NEEDED TO EVALUATE

COSTS, BENEFITS, AND ALTERNATIVES

USDA did not make the economic studies required by Government regulations before it issued the RFP in February 1974. Consequently USDA had no basis for evaluating the potential costs and benefits of the proposed procurement or the costs of alternative approaches for satisfying its ADP needs.

OMB policies and guidelines, the Federal Property Management Regulations, and USDA regulations require that well-documented systems and economic studies precede decisions to acquire equipment. Such studies provide a factual basis for determining whether the proposed procurement will achieve the highest practicable degree of effectiveness with optimum efficiency and operational economy. Two important items that are to be included in the economic studies are

- detailed comparative cost data for the existing and proposed systems and
- analysis of benefits and costs of the proposed system design and cost implications of alternatives for satisfying data processing and communications requirements.

When we asked USDA for its economic studies justifying the proposed project, ADS officials told us that the project had been economically justified on the basis that the estimated overall cost--for acquisition, preparation, and operation--of the proposed consolidation of installations and integration of data systems was less than what the overall cost would have been if each agency had been permitted to acquire and operate its own system.

We found that the proposed system had not been compared with the existing systems, contrary to Government regulations. Instead, the proposed system's costs were compared with the estimated acquisition and operating costs of decentralized systems that individual agencies might have acquired had ADP management not been centralized. Since the Secretary of Agriculture had approved the central management concept in 1971 and had established ADS in March 1972 to implement that concept, using cost estimates for projects based on a decentralized concept seems inappropriate.

One reason for cost studies is to provide the data needed to compare alternative approaches for satisfying user requirements. In January 1973 USDA decided on four departmental centers. Three centers already existed and the fourth was in the planning stage. There were no systems or economic studies made considering alternative numbers of centers or

locations. Consequently there was no consideration of the potential savings if only one, two, or three centers were established or of optimum geographical locations for the centers.

Two months after the RFP was released in February 1974, AMS prepared estimates of the costs of four centers covering the project's 8-year systems life. We computed the following overall cost of the project on the basis of those estimates.

<u>Item</u>	<u>Cost</u>
	(000,000 omitted)
ADP equipment and software	\$106
Site preparation and miscellaneous	14
Conversion	31
Telecommunications	146
Operating	<u>101</u>
Total estimated project cost	<u>\$398</u>

The RFP gives USDA the opportunity to acquire equipment for a possible fifth center. We estimated that total project costs could be increased by about \$60 million by such acquisition and related operation of the fifth center.

In summary, neither the USDA cost justification nor the AMS cost estimates considered the potential economies from using alternative system designs. We believe, therefore, that, after all data processing and communications requirements and system design studies have been completed, economic studies should be made which, as prescribed by policy and regulations, should include cost comparisons for existing and proposed systems and for alternative system designs.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

#### CONCLUSIONS

The RFP for USDA's data processing equipment involves procurement estimated to be in excess of \$100 million and could ultimately involve total acquisition and operating costs over an 8-year period of about \$398 million. This large procurement action was initiated without USDA's making the studies necessary for determining its data processing and communication requirements, contrary to Government regulations. This report shows that

--a consolidation and integration plan was not prepared,

--a user-agency requirements analysis identifying existing and projected data processing workloads and security requirements was not made,

--a communication requirements study was not made, and

--economic studies containing required analyses and information were not made.

As consequences of not having identified requirements and made the necessary studies

--USDA does not have a basis for relating its decisions on configurations, number, and location of the proposed computer centers to the actual needs of the user agencies;

--a teleprocessing-network analysis taking into account the type and volume of data, user locations, and communication cost is lacking, and therefore USDA has not determined that the centers are properly located;

--the impact of confidentiality and data security requirements on communications and the configuration and location of centers has not been determined; and

--insufficient data has been collected for assessing the proposed system's benefits and costs or comparing alternative solutions.

We recognize that USDA could expect economies and efficiencies to result from (1) consolidating and integrating data processing services USDA-wide and (2) replacing a collection of heterogeneous second- and third-generation equipment. At this time, however, the RFP is not based on the required studies and analyses.

As a result there are unanswered questions concerning the number and location of sites, the data processing equipment configurations, interfaces with communications equipment, and the privacy and security considerations. This situation inevitably leads to the conclusion that this procurement will not provide USDA with ADP systems that achieve a high degree of effectiveness with optimum efficiency and operational economy.

#### RECOMMENDATIONS

We recommend that the Secretary of Agriculture:

--Advise GSA to cancel the planned procurement of ADP equipment.

--Prepare a consolidation and integration plan for the proposed system.

--Complete the studies of USDA data processing and communication requirements, network and configuration analysis, security and privacy requirements, and economic factors.

--After completion and comparative analysis of the plan and studies, select, if warranted, the best alternative and prepare a new RFP based on established requirements.

USDA COMMENTS AND OUR EVALUATION

We discussed our findings and reservations regarding the proposed procurement with USDA's Assistant Secretary for Administration and his deputy on November 1, 1974. The Assistant Secretary agreed that a more thorough justification for the procurement was needed.

On November 13, 1974, the Deputy Assistant Secretary provided us with a position paper which agreed that requirement studies were needed and noted that the situation allowed the following three options.

--Cancel the procurement.

--Defer the procurement until the necessary studies and analyses have been completed.

--Proceed with the procurement in parallel with the studies and analyses, having the results available 4 to 6 weeks before the award is to be made.

The alternative USDA preferred was to proceed with the procurement in parallel with completing the requirement studies. The survey of requirements, begun in October 1974, is to be completed in May 1975. In essence, the position paper asserts that the studies will have little or no impact on the configuration and system design approach already chosen. USDA's stated position is that the RFP is flexible in that USDA can select a vendor and then negotiate the number of sites and the specific configurations needed at the individual sites.

On March 10, 1975, the Assistant Secretary formally commented on our findings and proposals. (See app. I.) USDA generally agreed with our findings but believed that the report did not completely and accurately present USDA's position. Essentially, USDA said that (1) it would not award a contract unless there was ample justification to warrant the action and (2) the procurement process should be continued because the additional delays due to termination would result in added costs, ill will among vendors, and operating problems which would force USDA to use sole-source procurements to upgrade equipment at each of its computer centers.

USDA also told us that it was not developing a new system but was standardizing and upgrading equipment for four

departmental centers that would use existing communications when the new data processing equipment was installed. These comments indicate that USDA is either abandoning or deferring its stated objectives--consolidating computer activity at some 47 locations into 4 centers, integrating data systems, and maximizing use of terminals for remote computer use.

We believe that, if USDA has abandoned its stated objectives, the procurement should be canceled because, according to USDA's consulting firm, existing equipment at three USDA centers that the firm visited was adequate, whereas equipment meeting the requirements of the RFP would provide considerably more computer power than USDA needs.

If USDA is merely deferring its stated objectives to the near future, a complete communications study, including network analysis and configuration, should be made before any data processing equipment is procured, because effective use of the equipment is directly dependent on how the communications system is tailored to meet user needs. Such a study, which would involve a considerable amount of time, could not be made until after all user requirements have been determined.

If delays in completing the studies result in operating problems requiring interim upgrading of computer capability, USDA would be required to consider the alternatives specified in Federal Management Circular 74-5. This circular requires agencies, before any sole-source procurement, to (1) validate the need for additional capability by determining whether the existing operation can be made more efficient, (2) determine whether there is available time on existing Government ADP systems or available excess Government-owned equipment, (3) determine, by a comparative cost analysis, that the use of commercial ADP services would not be appropriate (OMB Circular A-76), and (4) consider all responsive and responsible vendors, including equipment manufacturers, leasing companies, and third-party vendors.

#### GSA COMMENTS AND OUR EVALUATION

The Administrator of General Services suggested that we revise our proposals as follows:

- The USDA procurement not be canceled at this time because of the large investment by industry and the Government.
- GSA advise industry that the planned award date for the contract is being extended, pending the outcome of USDA studies that could result in canceling the procurement in whole or in part.
- USDA not award a contract until it has completed the required studies and obtained GSA's approval of its communications plans, as the Federal Property Management Regulations require.

Deferring cancellation of the procurement until the current USDA studies are completed, in hopes of saving an unspecified amount of sunk costs if the study results validate the RFP requirements, is not, in our opinion, a valid reason for not canceling the procurement now. We believe that USDA's revision of the stated objectives--consolidating centers and integrating data systems with several thousand remote terminals to a standardization and upgrading of equipment at four departmental centers that would use existing communications--is a substantive reason for immediately canceling the procurement. We believe also that USDA should make new studies to determine whether future data processing and communications requirements can be met through less costly alternatives.

We agree with GSA that the competing vendors should be advised immediately of the possible procurement cancellation. GSA could have taken this action in November 1974 when both GSA and USDA were advised of our preliminary findings. We believe that, since GSA is handling the procurement, pursuant to its statutory responsibilities, it should have notified the competing vendors of the possibility of cancellation in November 1974 and should have deferred the benchmark evaluations--begun in January 1975 and completed in March 1975--which presumably were costly to both the vendors and the Government.

GSA's suggestion that USDA not award a contract until GSA approves the communications plans emphasizes the importance of completing studies to determine the least costly alternatives before starting procurement. In our opinion, USDA's noncompliance with the Federal Property Management Regulations on matters that could have a great impact on a system's requirements is ample justification for GSA's canceling the procurement.

#### CHAPTER 7

##### SCOPE OF REVIEW

We reviewed OMB circulars and guidelines and GSA and USDA regulations related to the planning and procurement of ADP equipment. We also interviewed officials and examined records at USDA headquarters in Washington, D.C., pertaining to the planning and proposed acquisition of equipment for four departmental computer centers.



APPENDIX I

DEPARTMENT OF AGRICULTURE  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C. 20250

March 10, 1975

Mr. Fred J. Shafer, Director  
Logistics and Communications Division  
U.S. General Accounting Office  
441 G Street, N. W.  
Washington, D. C. 20548

Dear Mr. Shafer:

We have reviewed your draft report to Congress entitled "Improved Planning-- A Must Before a Department-wide Automatic Data Processing System is Acquired For The Department of Agriculture." Overall, we generally agree with the findings as presented, but feel quite strongly that the Summary and Details Sections of the report need to more fully capture the Department's position. Additionally, we believe that the report contains some erroneous statements of fact. This, in turn, has resulted in certain reported conditions and conclusions, particularly in the summary portion of the report, which do not reflect an accurate and complete "picture" of the Department's posture. Accordingly, we have limited our views to those specific areas of concern. These follow:

1. Overall Philosophy

Let me first point out that USDA's position and objective is identical to that of GAO's -- namely, that no contract award will be made unless sufficient justification exists to warrant the action. We believe that cessation of the procurement process is a "last resort" which can be taken at any time up to contract award, currently scheduled for June 17, 1975. The cost of additional delay due to premature termination of the procurement process as recommended by GAO would be substantial in terms of dollars, ill-will among the vendors and would result in very serious operating problems for USDA agencies requiring the capabilities that the proposed procurement will provide. Of equal concern to us is that this recommended delay would force the Department into sole-source upgrading of equipment at each of its computer centers with the very strong likelihood of creating a dominant position for one computer manufacturer, a situation of major concern to Congressman Brooks.

In addition to these major problems which would result from procurement cancellation, at this time, here are other factors that support our position to postpone any decision regarding contract award until the results of our studies are completed:

- . estimated 3-year delay in the procurement process causing increased costs fueled by inflation and concomitant inflexibility

- . to meet growing agency needs.
- . continued proliferation of programming inefficiencies, caused by mix of 2nd and 3rd generation equipment.
- . unnecessary expansion of one configuration to meet requirements when excess capacity is available on another, i.e., lack of flexibility to move workloads due to multi-vendor environment.
- . failure to attract and maintain high quality data processing personnel.
- . larger, more lengthy and more costly conversion process.
- . substantial ill-will from the vendors, which could possibly lead them to attempt to recoup their delay costs via higher eventual prices, if they bid.
- . substantial ill-will from the USDA agencies toward ADS due to lack of knowledge of the hardware/software environment, which will further delay already long-overdue systems development, not to mention the ever present need for ADS to improve its relationship with USDA agencies without regard to any possible delay.
- . potential deadlock situation leading to rapid deterioration of ADP services provided by ADS. This could occur if ADS is both unable to procure new equipment and unable to sole-source upgrade the capabilities at the data centers.

The cost of further delays in this procurement would be ruinous to the effort. We believe that there exists a strong case for continuing the process. You will recall that last December we provided GAO with cost estimates of what cancellation at this point would mean by way of monetary impact. We suggest that these data again be reviewed by GAO prior to report release.

## 2. Historical Perspective

The report implies that the current USDA procurement action is related to FEONET. Because of that implication, coupled with the use of selected report terminology, we are concerned that the basic thrust of the USDA action may be misunderstood. On page 4, for instance, the report indicates that "this justification is not valid mainly because it did not compare costs for existing and proposed systems and for alternative system designs." The fact is that the Department is not developing a new system; rather, it is standardizing the hardware of in-place configurations.

The communications facilities that are in place now are identical to those facilities that are planned to be in place when the new hardware is procured. Throughout the report, our procurement is treated by GAO as though we were establishing a completely new facility from both an ADPE, telecommunications and an applications systems standpoint (see page 18, second paragraph, under COMMUNICATIONS REQUIREMENTS). Essentially, the Department is standardizing the existing computer equipment which will result in elimination of a multi-vendor environment with combinations of second and third generation hardware and operating systems. Resulting from this standardization will be: (1) decreased numbers of hardware systems and, therefore, decreased manpower requirements for operating that equipment; (2) the capability to administratively interchange personnel and workloads between centers; (3) the elimination of hiring second generation-oriented programmers, and ultimately improving the overall programming efficiency and management within the Department.

## 3. Thrust of USDA's Position Omitted

On page 4, in the last paragraph, the report indicates that "USDA believes that the request for proposals is flexible enough for it to negotiate with the selected vendor on the specific equipment configurations needed

for each center based on the results of the studies and analyses." This comment does not place the USDA position in proper perspective. The report should reflect the fact that if our studies do not justify contract award, then the process will be canceled or delayed. The implication from the report wording is that USDA plans to consummate the contract without regard to the results of internal analyses. The same suggestion is present on page 30, end of the second paragraph.

4. Determination of Departmental Requirements

The report points out that USDA did not determine the data processing and communication requirements for all its agencies. Last fall, we agreed with the GAO position that a comprehensive determination of Department requirements had not been made. We further indicated that, prior to contract award, such a determination would be made and reviewed within the Department. We went so far, as you will recall, as to make available for GAO review the results of our studies. We still stand behind this offer. We are confident that the flexibility afforded in the RFP will permit us to procure only that which is necessary and justified -- no more. Otherwise, we will not proceed with the contract award. The results of our studies will serve to support this decision. Attachment I is a summary of major facts that were considered by the Department in the development of the workload presentation in the RFP which, we believe, may not have been fully considered by GAO. [See GAO note 1, p. 30.]

5. Security Requirements

The report shows that USDA did not give adequate consideration to security requirements that would reasonably protect personal data or other sensitive information from unauthorized access. We believe that the general security guidelines contained in the RFP, plus yet-to-be implemented Departmental privacy guidelines for automated data, will provide the requisite privacy security. The application of techniques suggested by GAO on page 23, last paragraph, is not, in our opinion, practical nor reasonable for the categories of personal data maintained within the Department.

Moreover, the report indicates on page 21 that USDA did not conduct studies which would have provided information such as user data to be placed on the system, confidentiality and sensitivity of that data, etc., and that USDA's request for agency requirements in October 1974 showed that there was still insufficient consideration of privacy and security requirements. It should be noted that the Department has considerable knowledge of data to support USDA programs including that kept in both automated and manual files. The Department reviewed and provided information on data bases with privacy implications to the Subcommittee on Constitutional Rights of the Committee on the Judiciary, U.S. Senate, during the latter part of 1972. In 1974, this information was updated by another survey within the Department.

On June 29, 1971, a task force was created to begin implementation of a concept to design information data bases. Phase I consisted of determining data requirements of programs conducted in USDA. As a result, six items entitled "USDA Data Inventory" were published in 1973 and 1974. This information which is updated on a scheduled basis, forms the building block of data knowledge within the Department. As correctly indicated on page 25 of the GAO report, the Department's survey did ask two questions relating to privacy and security. Information collected on the forms was specifically designed to allow easy cross-neck with the "USDA Data Inventory". The program identification codes on the survey forms correlate with the program identification codes on the data inventory. This was intended to simplify updating the data inventory by providing complete records of Departmental data with privacy and security implications.

6. Number and Location of Computer Centers

GAO reports that USDA initially decided on four Departmental centers and, therefore, made no systems or economic studies to determine the optimum number and locations of centers. This point was discussed thoroughly in our position paper to GAO last fall. The actual number of sites will be based on our estimate of the Department's requirements and, although the plan calls for four centers ideally, the RFP provides the flexibility of equipping any number of centers, up to five, including the most unlikely alternative of one or two.

As regards our earlier decision to go with four Computer Centers, we believe that Washington, New Orleans, Kansas City, and Fort Collins are appropriate locations. This must consider that at the time Departmental Computer operations were consolidated and centralized the Washington, New Orleans and Kansas City computer centers with its space, equipment and personnel were already there. Fort Collins was subsequently established to accomplish an improved geographical distribution and balance of workload in the Northwest. In this connection, we have listed below some key factors that need to be considered by GAO:

- . About 98 percent of the work processed by the Washington Computer Center comes from within five to ten miles of the Beltway.
- . In New Orleans, about 70 percent of the work of the Computer Center comes directly from the National Finance Center, co-located in the same building as the computer center. Another 4 percent comes from within the New Orleans area.
- . In Kansas City, 95 percent of the workload comes from the ASCS whose programmers are co-located in the same building as the computer center. ASCS is a widely distributed organization throughout the United States and a centralized location is appropriate. Additionally, all the work of the St. Louis Computer Center comes from the FmHA which is co-located in the same building as the computer center and it can easily be transferred electronically to, or consolidated with, the Kansas City Computer operation some 220 miles away, should the St. Louis Computer Center be phased out.
- . The Fort Collins Computer Center principally serves the Forest Service which has regions throughout the United States with a heavy concentration west of the Mississippi.

[See GAO note 2, p. 30.]

8. Procurement Proposal

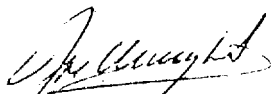
On page 17, the report states that "USDA proposed a joint procurement with GSA..." This is incorrect. GSA proposed the procurement, not USDA.

[See GAO note 2.]

In conclusion, we continue to maintain the position we previously conveyed to GAO, that to discontinue the procurement process at this time would be unnecessarily costly and impractical, and we strongly urge that the procurement process be continued. We again would like to reemphasize that should our requirements and cost benefits analyses indicate contract award to be unjustified, we will terminate or delay contract action. Should, on the other hand, the results of our studies demonstrate and justify moving ahead with the procurement, we would be willing to make available for GAO review the results of these studies.

We appreciate the time and effort GAO has expended on this review and believe as you do that no contract should be awarded unless sufficient justification exists to warrant the action.

Sincerely,

  
JOSEPH R. WRIGHT, JR.  
Assistant Secretary  
for Administration

- GAO note:
1. Attachment 1 is not included.
  2. Portions of this letter have been deleted because they are no longer relevant to the matters discussed in this report.
  3. Page references in this appendix refer to the draft report and do not agree with the page numbers in this final report.

APPENDIX II

UNITED STATES OF AMERICA  
GENERAL SERVICES ADMINISTRATION  
WASHINGTON, DC 20405

MAR 27 1975

Honorable Elmer B. Staats  
Comptroller General of the United States  
General Accounting Office  
Washington, DC 20548

Dear Mr. Staats:

Thank you for the opportunity to review your draft report, "Improved Planning - a must before a Department-wide ADP system is acquired for the Department of Agriculture."

We suggest that the GAO recommendations be revised to state that:

1. The USDA procurement not be cancelled at this time because of the large investment by industry and Government.
2. Industry be advised by GSA,
  - a. It is necessary to extend the planned award date of June 17, 1975, in order for USDA to complete necessary studies prior to award; and,
  - b. The completed studies may cause the procurement to be cancelled in whole or in part.
3. No contract award should be made by USDA until the USDA studies of agency,
  - a. Data processing and communications requirements,
  - b. Networks and configuration analysis,
  - c. Security and privacy requirements; and,
  - d. Economic factors

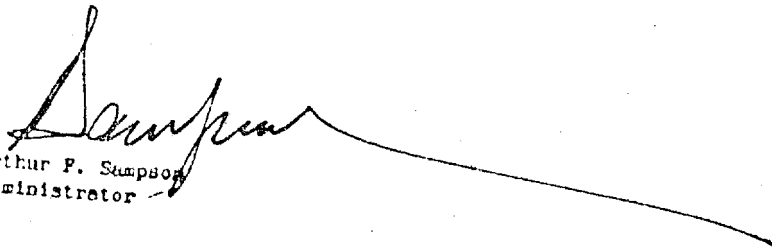
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have been completed and the requisite actions taken. In particular, there must be GSA approval of USDA communications plans in accordance with FPMR 101-35.

If there are any questions, please let us know.

Sincerely,



Arthur P. Stumpson  
Administrator

Approved For Release 2002/11/15 : CIA-RDP84-00933R000300270001-1

APPENDIX III

CHRONOLOGY

USDA'S ADP CONSOLIDATION AND INTEGRATION PROJECT

<u>Date</u>	
12-21-70	USDA staff study recommended concepts, including centralized management of ADP and development of an overall ADP plan.
4-27-71	ADP task force report recommended actions to implement concepts, including centralized management, consolidation of centers and joint use of remote terminals, and integration of data systems.
7- 6-71	Procurement task force formed to gather data on interim agency requirements and to write procurement documents for use until the overall ADP plan was completed.
7-12-71	Systems study task force formed to make systematic assessment of each agency's data processing program.
3-30-72	Secretary's order made ADS responsible for managing all ADP resources and for developing and implementing the overall ADP plan.
11-17-72	ASCS proposed RFP for centralized computer complex using 2,800 remote terminals, nationwide.
2- 1-73	USDA informally requested GSA's opinion of and reaction to a proposal to acquire ADP equipment for four centers on a sole-source basis.
3-15-73	GSA informally advised USDA that the sole-source proposal was unjustified and suggested that USDA prepare an RFP for a competitive procurement.
4-12-73	USDA requested a delegation of authority from GSA to procure equipment for four centers.
1- 8-74	USDA contract award to AMS to evaluate ADP organization, management, and planning.
2-28-74	Joint GSA and USDA RFP issued for equipment.
10-18-74	ADP applications system inventory survey forms sent to USDA agencies.
11-29-74	Closing date for vendors to submit proposals in response to the February 1974 RFP.
6-17-75	Target date for contract award.



APPENDIX IV

NEED FOR AND BENEFITS OF INTEGRATED  
COMMUNICATIONS AND COMPUTER PLANNING  
IN A CONSOLIDATION PROJECT

Technological evolution over the past 10 years has brought forward vastly more powerful equipment with major reductions in cost factors. GSA has concurred with estimates that computer power increases roughly with the third power of computer cost. Therefore, if a computer cost doubles, the resulting computer power will increase by a factor of 8. The economies of this favorable cost-power ratio can be realized only if the volume of work to be processed is large enough to justify the additional power and if a way is designed to get this workload to and from the computer efficiently and economically.

The Organization of Economic Co-operation and Development, a worldwide group of governmental ADP users, completed an information study in June 1973 titled, "Commuters and Telecommunications." The study noted:

"\* \* \* it is evident that the effective application of the computer art to meet individual, commercial, scientific and governmental requirements is becoming ever more dependent upon the availability of adequate telecommunication facilities at reasonable cost."

The study also concluded that:

1. The considerable underutilization of governmental computers could be reduced by appropriate telecommunication facilities.
2. Because computer costs are decreasing (50 percent every 2 years) more than telecommunication tariffs (2 percent each year), the latter will become an increasingly more important factor in large telecommunication computer systems, accounting for up to 75 percent of system cost.

The large commercial service bureaus take advantage of the economy of scale provided by the latest equipment. Recognizing that the success of these large-scale systems depends heavily on telecommunications, the bureaus make network and configuration analyses to develop site locations and a network configuration that offer the optimum cost-benefits for itself and its users.

USDA has apparently not recognized the importance of data communications planning and design before acquiring data processing capability. It plans to acquire large-scale data processing equipment and--sometime in the future--gather user communications requirements, design a network, and integrate it with the data processing equipment.

USDA's ultimate plan is to provide a computer utility in the form of a totally integrated computer network with readily transferable data and programs. Effective use of data processing equipment in a computer utility depends on how efficiently and economically data is transferred to and from the computer. Because of the close relationship between telecommunications and ADP and because USDA has not planned and designed a telecommunications network and made it an integral part of the consolidated ADP design, it is doubtful that USDA's efforts will offer optimum cost-benefits to its users.

We based this conclusion on the following considerations taken from GSA regulations and documents and from the Organization for Economic Co-operation and Development's study.

1. ADP equipment cannot be considered alone because it must contain storage for communications software.

2. The cost of data communications should bear heavily on the determination of where and how many ADP sites should be used. (AMS has estimated that the terminal-line costs of the USDA procurement would average about \$18 million a year for 8 years.) A total network approach to planning and design would allow the most economical and technically feasible placement of ADP sites.

3. The computer utility concept has been defined as the sharing of raw computer power and the various computer services by customers who are geographically far apart. As the product of two technologies--computers and telecommunications--it involves complex combinations of such factors as

- time,
- computation speed,
- instruction repertoires,
- data and procedure basis,
- peripheral equipment characteristics and uses,
- communication speeds,
- communication capacities, and
- access time to the system.

Because of the interdependence of the two technologies, they must be planned and designed in an integrated process to obtain optimum results.

4. To many users, a data communication network's primary advantage will be found in the areas of low cost, high transmission speeds, and reliability. To others, the most important advantages will lie in short minimum-charge periods, short connect times, low incidence of network-busy conditions, and full duplex 1/ transmission. Due to these variances in user requirements, the success of any large centralized ADP system, in terms of efficiency and economy, is contingent on how well telecommunications are tailored to meet user needs.

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1/Simultaneous two-way transmission.

5. Planning and implementing an integrated data communications network in conjunction with the new ADP equipment will inhibit the heretofore proliferation of fragmented data networks; proliferation leads to underuse and disorganization.

6. In an integrated-network operation, concentrators at strategic points in the network gather, organize, and distribute the workload for efficient transmission and processing. The concentrators selectively feed the data to and from the various large-scale systems. This leads to efficient use of the main ADP systems as it relieves them of routine housekeeping chores; allows for better use through workload leveling; and allows for backup, when necessary.

7. Data communication requirements should be analogous to and compatible with ADP requirements in developing system specifications and configuration using workload determination as a basis. Workload determination is developing the methods of describing workload and capturing descriptive workload data for present and future users of the new capability. In this sense, workload includes both data processing requirements and data communication requirements in that they represent the total needs of the present and future users.

8. Telecommunication requirements should be analogous to and compatible with ADP requirements in the following areas of systems development.

--User requirements--workload presentation and quantification.

--System control and compatibility--formulation of system requirements.

--Benchmark simulation--methodology for evaluation.

In summary, ADP and communication systems must be planned and implemented in a coordinated and integrated process to insure the efficient and economical use of a centralized system. Optimum benefits and maximum economies of computers and communications will be realized only when they are linked together. In combination, computers and communications add power to each other. Data communication links bring the capabilities of the computers and the information in the data banks to thousands of locations where it can be used and computers, in return, control the immense switching centers and help divide the enormous capacity among the users.

Procuring a large-scale system for consolidation without integrating a modern telecommunication network with it is analogous to building a large city and leaving intact the old country roads as the only means of getting in and out of the city--all functions within would operate at a less than optimum level, with a standstill at peak use.

## APPENDIX V

PRINCIPAL OFFICIALS OF  
THE DEPARTMENT OF AGRICULTURE  
RESPONSIBLE FOR ADMINISTRATION OF THE  
ACTIVITIES DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
SECRETARY OF AGRICULTURE:		
Earl L. Butz	Dec. 1971	Present
Clifford M. Hardin	Jan. 1969	Nov. 1971
ASSISTANT SECRETARY FOR ADMINISTRATION:		
Joseph R. Wright, Jr.	Mar. 1973	Present
Frank B. Elliot	Apr. 1971	Mar. 1973
Joseph M. Robertson	Apr. 1961	Mar. 1971
DIRECTOR, OFFICE OF AUTOMATED DATA SYSTEMS (note a):		
Henry Meetze	Jan. 1975	Present
J. Paul Bolduc (acting)	Aug. 1974	Jan. 1975
Arthur T. Devlin (acting)	June 1974	Aug. 1974
Melvyn R. Copen	Sept. 1971	May 1974
Arthur T. Devlin (acting)	Jan. 1971	Sept. 1971
Frank B. Elliot	Sept. 1970	Jan. 1971

a/Before reorganization in January 1974, the Office of Information Systems, which was established in March 1972, had USDA-wide responsibility for managing ADP activities. Before that date, the Office of Management Improvement had responsibility for coordinating ADP operations.

ABSENCE OF ASSISTANT SECRETARY WRIGHT

Senator MCGEE. We will commence the hearings with testimony from representatives of the Department of Agriculture. We asked Mr. Joe Wright, Jr., the Assistant Secretary for Administration to be with us today, along with Frank Elliott, who is presently Administrator of the Farmers Home Administration, but was the Assistant Secretary for Administration during much of the time involving this GAO report.

Because this hearing had to be called on relatively short notice, we all ran into conflicts of schedule. Mr. Wright had already been asked by the Secretary to appear on the program of a meeting in Latin America for the Foreign Agricultural Service people. The question was raised whether it was more important for Mr. Wright to be here for this hearing or to keep that commitment to speak down there.

I felt that decision ought to be left to the Secretary, in order to determine which was more important to him and to the Department. It was obviously more important that Joe Wright appear in Latin America.

So, we will proceed as best we can from that decision.

INTRODUCTION OF ASSOCIATES

We will have here in the absence of Joe, his Deputy, Mr. J. P. Bolduc and Mr. Henry Meetze, director of the Office of Automated Data Systems.

We have representatives in the audience from GSA and GAO. We are happy you can join us in ventilating this set of issues. We may be calling on some of you a little later, to fill in some of the cracks and crevices.

We also have representatives here from the Honeywell Company. Time permitting, we will hear from you. We have a limited time interval this morning.

In any case, you will have an opportunity to submit for the record whatever remarks would seem appropriate to you. They will be made a part of the record and the committee will take them into complete account as we try to assess what ought to be done.

COMMENTS FROM SENATOR FONG

I am wondering, before we plunge more deeply into this, Senator Fong, if you had any thoughts you wanted to share with us?

Senator FONG. Mr. Chairman, I am very pleased you have called for this meeting. Automatic data is a very, very complicated thing. With the private sector, I have experienced that every time we try to get into the automatic processing we find we get into a lot of trouble. Once you get into it, there is almost no return.

The choosing of the hardware and the software and all the other things that go with it, is really one that calls for a lot of thought and I look forward to your testimony here so we can evaluate as to what the criticisms have been and what the rebuttal is. Then we can decide as to what we should do here.

Senator MCGEE. I want to stress we didn't think this up. If it hadn't been for the GAO report, we wouldn't have had any business

here. We felt we were on the spot. We want to protect the obvious public interest in this matter.

#### INTRODUCTORY STATEMENTS

Do any of the Department witnesses have any opening remarks? I am told I loused up your name, Mr. Meetze.

Mr. BOLDUC. That is all right, Mr. Chairman, we have been mispronouncing his name for a year now.

Senator MCGEE. Mr. Bolduc, Mr. Elliott, do either of you have anything you want to throw out, before we begin?

Mr. BOLDUC. Not really, Mr. Chairman, except to mention at this point that we have indicated our desires throughout the last year to yourself, Mr. Chairman, at the time Mr. Wright and I testified before this committee this past spring, and to Chairman Whitten and his committee as well as to members of the Office of Management and Budget and the GAO and GSA, that prior to effecting any decision in connection with this procurement we would meet and fully discuss the circumstances surrounding this procurement and the results of our cost benefit and requirements studies. We would do this in order to achieve a common understanding or a consensus of agreement that the recommended decision is a proper one. We continue to consider and be sensitive to the overall costs, the taxpayers' dollars, congressional interest, the Department's interest and the vendors involved and everyone else concerned.

Senator MCGEE. I would assume that you do agree with the committee that the sharpness of the GAO's conclusions warrant our being here this morning?

Mr. BOLDUC. Absolutely, Mr. Chairman, no question about that.

#### CHRONOLOGICAL BACKGROUND

Senator MCGEE. In order to place this in the proper chronological perspective, the entire matter was initiated in December, 1970. A Department staff study concluded that USDA's ADP resources were not being used effectively. That staff report recommended that the Secretary of Agriculture approve certain concepts to avoid duplication and waste of resources in this field. The Secretary apparently accepted the proposals put forth by that study and formed a task force to develop the necessary policies and methods.

The Secretary of Agriculture at that time was Cliff Hardin. The Assistant Secretary for Administration was Joe Robinson.

That task force issued a report in April, 1971. It recommended consolidating ADP resources and identified some actions which needed to be included in the overall ADP plan.

Among other things, it recommended that USDA's data processing needs be analyzed and that the Department's central office should acquire detailed knowledge of all agency missions, plans, and applications.

That report was issued in April, 1971. It was approximately the time that you, Frank, became Assistant Secretary for Administration. When you were assigned your new position, were you advised of the recommendations of the task force?

Mr. ELLIOTT. Yes, sir, I was. If you note in the record of the GAO report, from September 1970, to January 1971, I was the Director of the Office of Management Improvement which included the automated data system in the Department of Agriculture.

Dr. Hardin at the time, when he was Secretary, had requested that we look into the use of computers as opposed to its effectiveness and applications to see that we were utilizing them to the fullest and with the minimum of computer expense.

When I took over as Assistant Secretary for Administration, I was quite well aware of the study because the study had been accomplished in the Office of Management Improvement.

GAO CHARGE THAT USDA FAILED TO CARRY OUT EARLIER  
RECOMMENDATIONS

Senator MCGEE. The GAO report relates on page 6:

The specific concepts that the Secretary approved in 1970, and the planning actions recommended in the 1971 report, provided, in our opinion, a sound basis for the efficient economical procurement and use of ADP and communications equipment. But these goals had not been accomplished because the recommended actions were not taken.

Would you comment on that statement, particularly the last sentence?

Mr. ELLIOTT. The recommended actions when I became the Assistant Secretary for Administration, were being undertaken by the Office of Management Improvement, later the Office of Automated Data Systems.

These actions were underway at the time as far as I was knowledgeable and concerned. They were being implemented. I had a personal interest to see that that task force study and the Secretary's charge as a result of the recommendations were implemented as prescribed.

Senator MCGEE. In other words, it is your recollection that the recommendations of the Special Commission's Report in 1971, were indeed being pursued?

Mr. ELLIOTT. That is correct. We centralized the computer responsibility in the Office of Automated Data Systems. We minimized any further activity on procurement of computers until we had the organization and the operation of the centralized computer activities set in place. As you are aware, in January, I no longer held the responsibility of the Assistant Secretary of Administration. It was at that time the question was first raised whether we needed to update any of the equipment or whether it would be best to go for a large purchase or leasing of new equipment. That was under study, but to my knowledge, no decision was made and I don't believe a decision has been made on that at this time. However, I leave that to other responsible people to answer.

Senator MCGEE. The Department generally agreed with the finding listed by the GAO. I suppose whatever divergence of opinion exist on whether the recommendations were in fact carried out are based on matters of degree. That would be conditioned by decisionmaking at that time.

CHANGE OF SECRETARIES

Mr. ELLIOTT. The basic problem for Dr. Hardin was to determine the correct policy to pursue. Were these recommendations the soundest policies and should USDA continue to work towards them? Dr. Hardin's policies were reaffirmed by Dr. Butz and we continued to follow the recommendations in the study. Both Secretaries were concerned that several agencies were considering their own future computer needs and telecommunications separately. Dr. Hardin and Dr. Butz approved the study. It resulted in the recommendations to centralize the existing equipment USDA had under single management. The centralization was to assure we were maximizing utilization of those equipments to the extent that the Secretary considered practicable. Further, that we were utilizing our computer resources for these agencies who did not have that resource, without them having to go and get new resources of their own.

CREATION OF SYSTEMS TASK FORCE

Senator MCGEE. After the original task force study report was completed in early 1971, you set up new task forces. One of those new task forces was a systems study task force, which was systematically to assess each agency's data processing program and the information received. It was also to study the source and the method of collecting the information, the type of processing, the output, who got the results, how the results were used and other factors.

The GAO report states that the Department was unable to provide documentation that these assessments were ever made. The question now is obvious. What did that systems task force do? What was done with any findings or recommendations that it may have made?

Mr. ELLIOTT. The answer to that is when I changed jobs, I didn't followup to see what occurred. Frankly, I don't know the answer to that question.

Senator MCGEE. Is there any continuing presence in the responsibility line? I think Joe Wright mentioned you, Mr. Bolduc.

Mr. BOLDUC. Mr. Chairman, the one individual who could provide you with a detailed accounting of the events occurring at that time with regard to data processing in general, and to the systems task force specifically would be the then Director of the Office of Information Systems, Mr. Mel Copen. However, Mr. Chairman, he is no longer with the Department.

I might mention that I am not totally familiar with what may or may not have happened in connection with the system task force which you addressed. I am aware of the conclusions drawn, in this regard, in the GAO report. We agree with it. I do believe that we have not concentrated in that area to the extent that we should.

We have pretty much relied upon the individual agencies to assess their own needs, review their own requirements, develop what they considered necessary to respond to their own workload. It is an effort we need to address more fully at the departmental level.

I cannot respond specifically to what may have happened in connection with that task force in 1973, and I am not sure that Mr. Wright could either.

Senator MCGEE. We need a lantern to shed some light on that. There is a little darkness there.



Mr. BOLDUC. If you would like for us to try to shed some light on this matter, we could provide the additional information for the record.

Senator MCGEE. If you could.

Mr. BOLDUC. Yes, sir.

[The information follows:]

The Department is not aware of a task force identified by the name indicated in the testimony. The Senator is probably referring to a task force created on June 29, 1971, to begin implementation of the concept to design information data bases. This group was charged with the responsibility to study the information system needs of the Department. The output of this work was the publishing of five volumes of a USDA Data Inventory from May 1973 to May 1974. This publication is being kept current and provides the input to a Departmental Data Dictionary.

#### INCLUSION OF OTHER DEPARTMENTS IN RFP

Senator FONG. Is this proposal only for the Agriculture Department or is there any consideration for other agencies?

Mr. BOLDUC. No, sir. It is strictly for the Department of Agriculture.

Senator FONG. Would that be more efficient just to have it for the Department of Agriculture, rather than to consolidate various other agencies?

Mr. BOLDUC. Senator, are you referring to departments or agencies?

Senator FONG. Departments.

Mr. BOLDUC. I suppose that in terms of economies of scale that you could expand computer services to a point where it might become more efficient dollar-wise, to include more departments. I think there are many items above and beyond the economies of scale, however, that need to be considered.

Privacy, for example, is a very critical factor. I think the quality of the services provided, the problems associated with size, coordination, and impact all need to be considered. At this point in time, our efforts—

Senator MCGEE. We don't use that phrase anymore, "at this point in time." [Laughter.]

Mr. BOLDUC. At this point in time, we are dealing strictly with the Department of Agriculture's needs.

Senator FONG. Do you feel that the Department of Agriculture alone is large enough so that the data processing requirements will be efficiently met while also satisfying security and quality considerations?

Mr. BOLDUC. Absolutely, sir. Absolutely.

#### CREATION AND RESPONSIBILITY OF OADS

Senator MCGEE. The GAO makes something of the fact that in March 1971, the Office of Information Systems was established within the Office of the Secretary. This was later changed to the Office of Automated Data Systems, the ADS, as we have been referring to it.

That change was made in January 1974. This office was made responsible for managing all ADP resources and developing the integrated departmental-wide information systems. GAO also says that although ADS gradually assumed management control of the Department's computer centers, it did not analyze the agencies' data

processing requirements. It did not carry out the other actions previously identified as prerequisites to an overall ADP plan. Was such an analysis the responsibility of the ADS?

REQUIREMENTS STUDY

Mr. BOLDUC. Yes sir, it was. If I can recall correctly, shortly after the Office of Information Services was established, which was about the time the Department of Agriculture was first beginning to put together its original request for a proposal, there was a comprehensive requirements study conducted. It reflected the results of a combination of requirements—the results of a very thorough study done by the Agricultural Stabilization and Conservation Service supplemented by workload being handled on other departmental computer centers and adjusted to account for workload forecasts and projections.

I think there is a difference of opinion between GAO and USDA as to the adequacy and completeness of the results of that study. It is not that we did nothing; we recognized the need to improve upon that study over a year ago and so advised GAO. We have been in the process of conducting a comprehensive requirements study involving all agencies—all applications throughout the Department. This particular aspect of the study, which has gone on for over 9 months now, is completed.

We are now analyzing and costing out those requirements and we will be in a position to advise this committee of the results during the last week in June.

As we indicated in our June 9 letter to you Mr. Chairman. We do agree that we have not done the comprehensive type of study that GAO indicated we should have done. We did address that and we have been doing so for some time now.

Senator MCGEE. Let me say in response to that point, we aren't about to sit here and wait until the last week in June. The torch had already been applied to our posteriors here by the GAO report. That is the reason that we must proceed.

PURPOSE OF CURRENT RFP

Mr. BOLDUC. I would like to mention one thing, Mr. Chairman, that might help clarify some of the questions that are being raised now or statements that might be made later during this hearing. That is, we are simply attempting to procure hardware.

Senator MCGEE. Now you sound like the Secretary of Defense.

Mr. BOLDUC. We are simply attempting to upgrade what is currently out there now. We are not coming in with any highly sophisticated telecommunications system. What we have is an ever increasing need within the Department of Agriculture to upgrade what is currently out there now.

Senator MCGEE. You say you are simply acquiring hardware and upgrading your present equipment. GAO addresses itself to this question in some detail commencing on page 21 of its report. These comments suggest that if you are now simply upgrading present equipment, this represents a change from your original plans. Is GAO correct in its observation that you are abandoning or deferring your originally stated objectives?

Mr. MEETZE. No, Mr. Chairman; USDA is not abandoning or deferring its originally stated objectives.

Senator MCGEE. Would you please review and comment in some detail on the paragraphs at the end of page 21 and the first two paragraphs on page 22 of the GAO report?

Mr. MEETZE. Mr. Chairman, we will be happy to respond to that in the record.

[The information follows:]

COMMENT ON REPORT

GAO states correctly that USDA is not developing a new system but is standardizing and upgrading equipment. GAO then concluded that this was an implication we had abandoned our original objectives. GAO is incorrect. One of the concepts endorsed by the USDA 1972 report was that of a computer utility. This report indicated that "the system (computer hardware) must take full advantage of modern technology and be so designed to make the full capabilities of this technology available to all users." It goes on to say that "compatibility of equipment is essential" and that provisions must be made for having "duplicates of switchable and critical components and data paths to provide for alternative or fall back configurations." USDA's procurement action addresses only the computer utility concept and would result in compatible equipment (equipment similar in nature) installed in each of the data centers and which provide for modularity in the equipment in the event that one particular component fails. GAO erred in assuming that the procurement addressed all three concepts simultaneously.

GAO refers to an AMS report which indicated that existing equipment at three USDA centers was adequate. In fact, excerpts from a report (ADP Utilization In The United States Department of Agriculture—dated May 3, 1974) provided by AMS indicate that GAO's statements were incomplete.

"Current projections of ADP budget growth of the using agencies show about a 50% growth over the next couple of years, so it is quite possible that one 360/65 (in New Orleans) is not adequate. On the other hand, there does not seem to be any immediate urgency for another 360/65." (Page 34)

"In our review of KCCC we have addressed the management aspects of the problems. From an interim supply point of view, KCCC seems to have adequate resources to meet the demands up to July 1975." (emphasis added) (Page 34)

"FHA shows only a 35% growth in their ADP budget over the next two years, so that SLCC should be able to handle such growth with their current set-up, possibly going to weekend shifts if necessary." (Page 35)

"The growth of the using agencies at WCC will not fill the 370/168 over the next year and a half. (emphasis added) Therefore, the interim supply situation at WCC is very good." (Page 35)

The first paragraph on the top of p. 22 reiterates GAO's interpretation of Federal Regulations that a complete communications study must be undertaken before any data processing equipment is procured. The government regulations concerning communications and ADP studies are somewhat unclear regarding the approach to be taken when computer equipment is upgraded. For instance, if our procurement addressed only one site, than it would be impractical to undertake a complete telecommunications, optimum site location, and requirements study, and, as a result, shift center and communications locations and two years later, if we were to issue a separate RFP for another center to undertake the study again, etc. In fact, GSA in a letter dated April 22, 1974, to Mr. Philip M. Walker, Vice President and General Counsel, Telenet Communications Corporation, states that ". . . Experience dictates that, when an agency requires both ADP and telecommunications, with NEITHER (emphasis added) portion already in place, the overall system be planned and acquired as a total entity. . . ." However, USDA has both ADP and telecommunications already in place.

The second paragraph on p. 22 indicates that USDA would be required to consider the alternatives specified in Federal Management Circular 74-5 if delays in completing our studies require interim upgrading. USDA concurs with that observation.

It is our interpretation that, under the circumstances existing in the USDA procurement, we are in complete compliance with federal regulations issued by the General Services Administration regarding the development of telecommunications plans simultaneously with the procurement.

CURRENT ADP FACILITIES

Senator FONG. What ADP hardware is currently in use by USDA?

Mr. BOLDUC. We currently have at the Washington Computer Center an IBM 370 model 168. We have at the New Orleans Computer Center, an IBM 360 Model 65 and an IBM 360 model 40. We have IBM Model 50's in Kansas City, an 1108 Univac at Fort Collins Colo. and a stand-alone Burroughs 2700 and 3500 operating in St. Louis.

All we are attempting to do, sir, is to continue to provide the type of service that the Department of Agriculture requires—based on agency needs—by upgrading our equipment to respond to that ever increasing need.

Senator FONG. Are you leasing or have you purchased that hardware?

Mr. BOLDUC. The 370/168 in the Washington Computer Center is leased. The model 65 in New Orleans is owned by GSA and the model 40 is owned by USDA. The Kansas City equipment—one model 50 is owned by USDA and one is leased. The Univac in Fort Collins is leased and the Burroughs 3500 in St. Louis is owned by USDA; the 2700 is leased.

DISPOSITION OF CURRENT EQUIPMENT TO BE REPLACED

Senator FONG. The hardware items that are now leased would be returned if you had a more sophisticated system?

Mr. BOLDUC. Yes, sir.

Senator FONG. For those that you purchased, what do you contemplate doing with that?

Mr. BOLDUC. I believe GSA might be in a better position to comment on that. But, as I understand it, equipment owned by USDA or GSA could be made available for usage by other departments.

HOW THE RFP WOULD IMPROVE THE CURRENT SYSTEM

Senator FONG. The proposal that you have here, how much improvement will there be on the present system?

Mr. BOLDUC. Let me ask Mr. Meetze to address this because I think we may be getting into a rather technical area.

Mr. MEETZE. If I may just review the type of equipment we do have, we do have five computer centers. We have three major vendors. Within those five computer centers we have a total of 18 computers.

They vary in age, going all the way back into the 1950's until the latest one, the one in the Washington Computer Center, which is an IBM 370, Model 168. This is the latest equipment.

Attached to some of the equipment in the computer centers we have a variety of different other vendors. So, we may have five and six vendors on one particular computer in a computer center.

Most are very much less in power than what we believe we will need over the next 8 years. For instance, the type of equipment that we would propose, acquiring for Kansas City, in relation to the equipment that is now there, would run around 16 times the capabilities of the equipment there and approximately four times the capabilities of the equipment in New Orleans, and about maybe one to one-and-a-half times the capabilities of the equipment in the Washington Computer Center.

There are significant problems involved in diagnosing problems when there are multiple vendors. Additionally, the older equipment obviously does not provide the economies of scale available with more modern computers.

The proposed procurement would replace those 18 computers with four computers in four locations over a period of 8 years, depending upon the need of that particular computer center. We would obviously not install equipment until or unless the need dictated.

#### ADDITIONAL STUDY OF USDA NEEDS

Senator FONG. This criticism by GAO that you have really not looked into all of the details, seems to be a sweeping indictment. Are you prepared to review and analyze each agency and see where you have defaulted as far as GAO is concerned or, where you can, substantiate what you have really done so that you feel that you have met the requirements?

Mr. BOLDUC. Senator, we have had discussions with GAO, I believe, ever since they first came into this, back in July 1974. I think GAO would be willing to testify that we have cooperated fully with them. We told them very early in the review that we recognized that we needed to conduct a comprehensive review of departmental needs, because the earlier study was not sufficiently adequate to satisfy our concerns. We also told them we were in the process of developing those requirements and that no contract would be awarded until all pertinent studies were completed and merited such action.

#### FUTURE MEETING WITH GAO

We have also told GAO that before moving ahead with the procurement, we would meet with them and make our complete files available for their review. Essentially, these files would show where we have been where we are at now; and where we are going. They would also include the results of our requirements study, and the circumstances surrounding our actions. We would seek their recommendations before moving ahead. We planned to have this completed by the last week in June.

Senator FONG. Within the next few weeks, you feel you will be able to sit down with GAO and discuss this?

Mr. BOLDUC. Yes; we can sit down with GAO, GSA, OMB, members of this committee, members of the House Subcommittee on Appropriations or anyone else who demonstrates an interest and has a genuine need to know.

Senator FONG. Why should we be having this hearing if you are willing to sit down with GAO within the next few weeks to iron out the differences? There is no commitment of any appropriations as far as this committee is concerned, is there?

Mr. BOLDUC. Mr. Chairman, in all candor, I might mention that when asked to appear here today recognizing that we had indicated to both subcommittees on appropriations our desires to meet with them when all the facts were known and available—the same question also crossed by mind.

On the other hand as the Chairman has indicated, there have been some concerns expressed about this from sources inside as well as

outside of Government and I think the need to air out some of the differences at this time is timely and perhaps we should continue to do that, with the understanding that we would return here in the last week of June to followup.

Senator FONG. You are going to get together with GAO in a few weeks?

Mr. BOLDUC. We plan to; yes, sir.

Senator FONG. You feel by the end of June, you will be able to look into all the details of what you have to do?

Mr. BOLDUC. Yes, sir.

Senator FONG. And to sit down and have a very intelligent discussion with GAO, so that you can meet their criticisms?

Mr. BOLDUC. I would agree with the first part of that, sir. The latter part I am not sure that we will ever meet their criticisms in total.

Senator FONG. At least there is a willingness on your part?

Mr. BOLDUC. Absolutely; that willingness has been there from the very beginning. As a matter of fact, we extended an offer to GAO to participate with us during this study so we could work together on this problem. They declined, I might add, justifiably so.

As a former professional auditor, I can well appreciate and understand GAO's need to remain objective and independent and to avoid even the appearance of a conflict of interest. But I do think they ought to take a look at what we have developed in the final analysis before moving ahead.

#### RATIONALE FOR CONTINUING HEARING

Senator FONG. Mr. Chairman, in view of this statement I am wondering what would be the rationale for proceeding?

Senator MCGEE. I think the rationale is very plain. It was laid out here in the very beginning. The investigative arm that the Congress of the United States has is the GAO. The GAO made a very searching and revealing examination of this problem that raises some extremely serious questions. The Department didn't rush down here to us and say, "We have a lot of headaches here and we have a lot of things that we didn't do. It didn't turn out the way we had hoped."

The charge is that the Department is preparing to proceed on a procurement program costing nearly one-half a billion dollars, without having done the preparatory work, in the judgment of our investigative arm.

Once that charge and that study hit the surface, then events began to move. The Department does not agree with the conclusion that the procurement program should be stopped until they can prepare the guidelines and the other necessary criteria for it. We are not going to leave that to a cozy settling-up in the last week in June.

We are going to make the final determination. That is our responsibility, because the buck starts here. We have to put up the money. We don't intend to leave that to happenstance, to the wake of events that flow as a consequence of the investigation that was made.

To do otherwise, I grant you, would be a lot easier for us.

We could pass that buck on, except we have to put it up in the first place. I don't think it would be responsible on our part.

GAO RECOMMENDATION FOR CANCELLATION OF RFP

Senator FONG. I understand, Mr. Chairman. The GAO says to cancel the contract; is that true?

Senator MCGEE. They stopped the procurement, and recommended that there be no procurement until this could be worked over and the preparatory work done. That was my understanding from the very beginning.

Mr. BOLDOC. Could I comment on that, Mr. Chairman? We have a very, very deep-seeded concern in connection with the cancellation of the procurement at this time. We agree with what GAO is attempting to achieve. That is, that the procurement be justified—cost beneficial—reflective of the requirements demonstrated by the Department's needs. The magnitude of this procurement demands that all of us in the Department, the Congress, and the Senate, keep all options open. It is imperative that we not cancel an option at this point in time until we have taken a look at the final studies that we have conducted. The major procurement may or may not be the proper way to go. There maybe other alternatives that will need to be considered.

I would be deeply disturbed if we were to be instructed to cancel now, as recommended by GAO because it would take away from us one of the very viable options without first having considered all the facts.

In terms of time delay, and we have members in the audience here from GSA that can add to this, but generally a procurement of this nature, if we were to cancel today and start again tomorrow, it would be about a 3-year period of time until we could get new equipment installed.

Gentlemen, I must reemphasize that a 3-year delay in responding to departmental needs would have a very serious impact on our operations. Frank Elliott, for example, with FHA in St. Louis, is operating at maximum capacity. We have to respond to that type of need.

All I am suggesting is let us keep all options opened until we have completed the results of the study. Then let us look at it in terms of what is the most appropriate course of action to take.

COST IF RFP IS NOT CANCELED IMMEDIATELY

Senator FONG. What is the cost to the Department to keep the options open?

Mr. BOLDOC. The cost to the Department, per se?

Senator FONG. Yes, to keep the options open or is there no cost?

Mr. BOLDOC. Most of the Department's cost has been incurred during the last 3 to 4 years through which we have been involved with this procurement process. We have developed requirement studies—cost benefit analyses—

Senator FONG. What I am saying is this: instead of cancelling you are saying actually let things ride, this is what you are saying?

Mr. BOLDOC. Yes, sir.

Senator FONG. To let things ride, what does it cost?

Mr. BOLDOC. Nothing.

Senator FONG. What we are talking about is whether we are going to cancel right away today and forget everything or say, let things stay as they are. There is no cost, we will get together with GAO?

Mr. BOLDUC. Absolutely; this is what we have suggested. We have met with Mr. Dudley Miles of this committee's staff and Mr. George Evans of the House subcommittee staff and have kept them apprised of the developments. Our position with GAO was simply not to cutoff any viable option at the intersection. Let us move ahead and consider all options so we can make a well-informed decision. To cancel now, I believe would be premature and could be costly.

USDA POSITION ON PROCEEDING WITH RFP IN SPITE OF GAO

Senator FONG. Is the Department of Agriculture obstinate in proceeding to acquire hardware in spite of the GAO criticism?

Mr. BOLDUC. Senator, we are not obstinate about anything. All we are seeking is an opportunity to complete our studies and meet with this committee, the House subcommittee, GAO, OMB, and GSA to discuss our proposed course of action.

Senator FONG. You are not ready to put out a contract?

Senator MCGEE. We don't use that phrase either. [Laughter.]

Mr. BOLDUC. We are not ready to award a contract. I might mention that the original target date for a contract award was June 17. It has been delayed for an approximate period of 2 months by reason of some difficulty that has been experienced by the vendors in benchmarking for 8 years. We believe that the date for deciding to award a contract will be sometime in August.

RESOLUTION OF GAO-USDA DIFFERENCES

Senator FONG. You will be getting together with GAO before that?

Mr. BOLDUC. Absolutely

Senator FONG. If the GAO insists that their criticism is correct, you still have a lot to do, you will take that into consideration?

Mr. BOLDUC. Senator, we will take it into consideration. I believe that where there are judgmental differences, we ought to come before this committee and the House subcommittee, confer with OMB and GSA, to discuss our respective positions in order to try to reach agreement. I think there are going to be some areas of disagreement. Do we in fact go with the procurement, sole source upgrade, in all four computer centers? Those are but a few of the considerations that need to be attended to. It is not a simple matter of cancel or don't cancel. It is a matter of making sure we are on sound ground before we make that type of major decision.

The Chairman mentioned his concerns earlier about the major cost of this procurement. I am as deeply concerned as he is and I can assure this committee that I do not wish to move forward unless I, personally, along with Assistant Secretary Wright, Secretary Butz, and others are fully justified in our actions.

Senator FONG. What you are saying is that you will get together with the GAO, sit down and iron whatever differences you can iron out. If you agree on that, then you will proceed?

Mr. Bolduc. I can only tell you sir, that we will make the effort to get together with GAO. I don't know what their reaction will be.

Senator FONG. If you can't agree on certain items, you will come before this committee and the committee in the House and see what the committee decides?



Mr. BOLDUC. Yes, sir.

Senator FONG. You will not exercise your independent opinion in spite of the criticism, if there is a criticism by the GAO of that particular item?

Mr. BOLDUC. Yes, sir. Our position is a very simple one. We have a need. We don't have the capacity or the equipment to respond to that need. If we cancel the big procurement, somehow we have to be able to respond to that need.

If we don't respond to that need, I am sure that those not being serviced will make their views known. We have to achieve a good balance in this very delicate area.

Senator FONG. There is no cost to the Government in this period?

Mr. BOLDUC. No, sir; not unless the Chairman or someone else can see some built-in costs.

#### LACK OF USDA REPARATION FOR RFP

Senator MCGEE. I can tell you one cost that you setup. You say we have run out of time, and if we delay this in any way, it is going to be disastrous. That is one side of the cost factor. The cost factor is also equaled the other way.

You are leaving out, it seems to me, the one thing you yourself put into the case for going slowly here for the moment. Somebody, somewhere along the line, didn't do their job. That is what GAO is saying.

You have had the time since the need was recognized and action was begun to try to get out here to the solution, to borrow your analogy. But something went wrong in all of this, where there was no adequate preparation made, which the Department admitted. You had an inadequate assessment of the criteria and the ingredients to go into this new program.

All that is missing we might say is the case for procurement. That is all that is missing. Not the case for some kind of procurement at some time, but the whole preparation for procurement is missing. You don't just go out and procure. You have to first assess your needs in this very, very complex mesh.

There are requirements that the system can meet. It seems to me that it is imperative that such a system be developed. The insistence is that it take place with the necessary preparatory efforts.

#### NEED FOR COMMITTEE TO KNOW WHAT IS REQUIRED

You tell us, Frank tells us, and poor Mr. Copen is not here to tell us—but he would no doubt since you said he would—that they didn't do it well enough or the right way. There were too many gaps. This committee is meeting here now to assess what, in the light of GAO's report, is required.

You are offering an end of June, sit-down session with GAO. That is one option. Senator Fong properly selects that out. It isn't going to bail this committee out, for the reason that we are already confronted by a serious lack within. We want to know why, and how to proceed.

The assertion is very eloquently spelled out in that report that the failures in establishing those criteria assessments tend to recom-

mend no procurement program now. Your position as now modified is to wait until the end of June, wait until you can have a chance to talk it out to explain it to this committee and explain it to the House committee, and then procure it. That is a little different.

SOURCE OF CONCERN

I think we are entitled to know where this got off the track. This must be done as wisely as possible, and in the right way, if humans can put something together of that sort. What is missing between here, as you explain it, and here, as we see it, is what the GAO report is all about.

That is the reason that we have to have these answers or opinions as a part of the record. That is the reason that the committee is proceeding along this line. We weren't invented as a committee by another committee to resolve its problems. I know that is a customary way to solve problems to which you don't find easy answers. Appoint another committee to get the answers you were looking for in the first place, and you're off the hook. So you have got to understand sir, the role of the Congress here.

We didn't seek this out. God knows, we have plenty to do. But we are compelled to look at this. The Department finds itself in conflict with GAO at the point of action. This is not a problem back at the point of serious charges that have been made. Most of those charges the Department rolled with and said, "yes, we did. We failed. We didn't do it right. Somebody went wrong. We want to know now what we have to do to put it back together so it can be done right".

DEPARTMENTS PREPARATIONS PRIOR TO RFP

Mr. BOLDUC. Let me place one thing in perspective. We did not out of the clear blue sky decide we needed to upgrade our equipment and go out on the street with a request for a proposal.

There were studies conducted, and some comprehensive analyses done. There were projections made. We have the results of those studies. On that basis, we went out on the street. True, there have been some changes in workload and direction during that period of time. The Agriculture Conservation and Stabilization Service had a very high workload during the periods of time when those studies were made. This is not presently the case. The Farmers Home Administration's workload on the other hand, has increased very significantly, which dictates the need regardless as to how adequate or inadequate the original studies were to update the study results in terms of what is going on today.

But to make the statement and I am not referring to your statement, Mr. Chairman—

Senator MCGEE. Whose statement are you going to be referring to?

Mr. BOLDUC. I am referring to the GAO statement, to make the statement or give the appearance that we did nothing, is a misnomer. They may not agree with the adequacy of the study. They may have felt that we should have gone further. They may have felt that we should have considered certain aspects more fully. They may have

felt our forecasts were based on erroneous assumptions or incorrect information, but all of these are judgements and most certainly are debatable.

#### NEED TO UPDATE STUDIES

We do agree that there is a need to update the study. We do agree that the study may not be as comprehensive as it should have been. That is the reason why we are not going to move ahead with a contract until the results of those studies we are currently conducting are complete and show the need to move ahead. It was not that we did nothing.

Senator FONG. Actually, what you are doing is asking for proposals to update something that you had already been using. Is that correct?

Mr. BOLDUC. Senator, it is a combination of several factors, update, a very serious consideration of privacy matters in light of what is going on today, increases in work load that may not have been there 3 years ago, a more comprehensive review of agency needs, et cetera. It also considers addressing new assumptions as we project total departmental needs. It considers a multiplicity of factors which need to be addressed before any final decision can be made.

Anyone worth his weight in salt would not use the results of a study conducted 2 years ago and award a contract today on that basis without considering the changes that have taken place during the past.

Senator FONG. In other words, you have found the equipment you have does not give you the information you want?

Mr. BOLDUC. It is a matter that the equipment we have today, as we look into the future, is not going to have sufficient capacity to respond to departmental workload needs.

Senator FONG. You are asking that these conditions be changed, upgraded so you may be able to perform your work more efficiently. In doing this, you have asked companies to submit proposals. In this, the GAO says you have not gone into it sufficiently to really ask them to give you the proposals.

Senator McGEE. With which the Department agrees, if you read the Department reply.

Senator FONG. They agree that in certain instances, they have not really studied the problem as thoroughly as GAO wanted.

Mr. BOLDUC. Yes, sir.

Senator FONG. They themselves probably wanted. Now you are studying the problem.

#### DIFFICULTY OF CARRYING OUT STUDIES

Mr. BOLDUC. We have been. It is not an easy exercise. There are some 11,000 different computer programs in the Department. It is a very complicated exercise and becomes further aggravated by having to project what the future holds in store.

Senator FONG. As to just selling items, we find that we run into all of these complications. We find in putting in the new system, we just got to continue with the old system until we get the new system really working right. Sometimes we find that the new system doesn't work. It is a very expensive procedure and it is a very com-

plicated one. The GAO wants you to be sure that you have everything answered or almost everything answered before you proceed. You are in a position now to agree to that?

Mr. BOLDUC. We have all the way along. We have not disagreed with that. Those questions must be answered.

Senator FONG. You feel by just waiting for this period, rather than cancel the contracts that you have with the companies, you feel that something can be salvaged from this?

DELAY INVOLVED IF RFP IS CANCELED

Mr. BOLDUC. Absolutely, Senator. If you were to cancel today and in 2 or 3 weeks from now, we find the results of our studies to demonstrate the need and justification to move ahead with this procurement, we would then have a 3-year wait period.

Senator FONG. That is a long time.

Mr. BOLDUC. Yes, sir, it certainly is. It is just a matter of wanting to keep all options open. That is all we are asking. Then let the facts speak for themselves.

Senator MCGEE. Let's not beat the dead horse that I created in my misstatement earlier. Our interest is not to cancel today. What we are trying to do is to decide what best ought to be done now, in light of the charges which both sides seem to agree to, until we try to move toward conclusions.

NEED FOR CRITERIA TO CONSIDER RFP

Then all the disagreements break out all over again after having agreed to the seriousness of omissions, commissions, and delays within. We will hear from the GAO. I would suppose that they are not requiring all the answers in advance. As I read the report, they are requiring all of the necessary sophisticated expectations of criteria to be plowed into the new mechanism, the new processes that would make it possible to arrive at all the answers, if that is feasible.

That is the difference. It is not a matter of prejudging answers before you get them. It is a matter of trying to set up the criteria, the requirements. It is not a matter of just procuring hardware. It is a matter of making sure that you are procuring the right hardware, that meets the large dimensions and requirements of a communications system that needs to be tied together in as relevant a way as it can be.

CONSIDERATION OF TELECOMMUNICATIONS NEEDS

That leads me to a matter of concern. A moment ago, you made some statement about the relationship between that and communications. I think you suggested, if I remember it, that the hardware was the procurement factor, even without the communications. Is that an approximation or am I torturing that again?

Mr. BOLDUC. Yes, sir. The request for proposal that is on the street today does not include a telecommunications network proposal.

Senator MCGEE. Was that one of the serious points made by the GAO? They questioned whether that should be or could be effectively or wisely separated?

Mr. BOLDUC. Mr. Chairman, there are within the profession of automated data processing, two schools of thought with regard to telecommunications versus hardware. Some indicate that the hardware and telecommunications studies are related requirements and should be conducted simultaneously. Others believe that hardware needs can be determined first and adjusted later after the telecommunications plans have been developed.

Since this borders on the technical area, I will turn it over to Mr. Meetze.

Senator MCGEE. I am not sure I want to be caught up between the pros between two schools of thought. I think what you establish is it is an open question?

Mr. BOLDUC. Yes sir, and the guidance we have received from GSA and GAO as well.

#### "SOLE-SOURCE" PROCUREMENTS

Senator FONG. Your letter of March 10, 1975, to GAO states that GAO's "recommended delay would force the Department into sole-source upgrading of equipment at each of the computer centers with the very strong likelihood of creating a dominant position for one computer manufacture."

Why would it be necessary to make "sole-source" procurements? What brands of computer hardware does the Department now have, and why and which manufacturer would assume the dominant position?

Mr. BOLDUC. As stated previously the term "sole source" is being misused in this context. What is meant is that it would be necessary as an alternative to this present procurement to upgrade the present in place equipment with expanded or larger equipment models of the same kind and same manufacturer as are presently in place. However, this would be done through a competitive procurement specifying the manufacturer's name and computer model number but acquiring it on the open market from whatever source might offer the most economical price to the Government.

The Department now has many brands of computer hardware: IBM, UNIVAC, Burroughs, to mention those at the largest computer centers. There are also Control Data Corporation computers in some Forest Service Regional Offices. Besides these there are many, many, many lesser known manufacturers computer systems in smaller USDA field offices and installations. Under this alternative it is most probable that IBM would assume the dominate position.

Senator FONG. Your letter of March 10 states that USDA is not developing a new system but rather it is standardizing the hardware of in-place configurations. Does this mean that small agency ADP hardware will remain in use despite the acquisition of more advanced departmental equipment with greater capacity?

Mr. BOLDUC. The departmental plans have never envisioned that all USDA requirements could be satisfied by the upgrading of current equipment contemplated with this RFP. There are many unique requirements of departmental agencies which are best and most economically satisfied by specific dedicated smaller computer hardware which best suits the needs of the project or agency using it.

While many agency computers can be absorbed by the advanced departmental equipment to be procured under this RFP it is most probable that there would be a need for utilization by the agencies of other sources from private industry, universities and in some cases their own dedicated small computers.

#### BENCHMARK TESTS

Senator FONG. Was there any discussion within the Department to postponing or cancelling the benchmark test after the GAO preliminary findings became known? Why was such action not taken, especially since your Department is in general agreement with GAO's findings?

Mr. BOLDUC. No, Senator; because the preliminary findings were just that—preliminary. We then indicated in response to these findings that the requisite studies were on-going and that the procurement process should continue. It was not until the first week in June 1975, that we were aware GAO did not officially accept our response to their draft report.

#### BUDGET COSTS

Senator FONG. The budget estimate for "ADP systems" in fiscal year 1976 is \$28,082,000. Does this reflect all ADP costs within USDA or do agencies incur other computer costs within their own program?

Mr. MEETZE. This figure does not reflect all ADP costs within USDA. Total estimated ADP costs of USDA as reflected in our April, 1975, A-11 submission to the Office of Management and Budget indicates a total of \$68 million.

Senator FONG. Will the proposed computer acquisition costs also be reflected in transfers from other agencies as shown in this item?

Mr. BOLDUC. Yes; the proposed computer acquisition cost will be funded under the working capital fund of the Department which is reflected in charges levied upon the agencies for services rendered at these departmental computer centers.

Senator FONG. Has the Department made a projection of ADP costs over the 8 year life of the new equipment?

Mr. MEETZE. Yes; as I indicated previously, the total incremental costs which would result of this procurement could reach \$64 million on a discounted basis over 8 years (\$90 million in 1975 dollars).

#### CANCELLATION COSTS

Senator FONG. Why would cancellation at this point greatly delay computer acquisition if USDA is already in the process of fulfilling most administrative requirements and is confident that the RFP reflects the most cost effective approach?

Mr. MEETZE. Many agencies' plans are in limbo pending the outcome of this procurement. Some new systems are not being undertaken until this procurement action is settled. USDA is examining other alternatives in addition to the RFP to determine which reflects the most cost effective approach.

CONTRACT AWARD

Senator FONG. What is your current estimate for the contract award?

Mr. MEETZE. Assuming an early approval to continue the procurement process, a contract could be awarded during the latter part of August 1975.

DEFINITION OF TERMS

Senator FONG. You have testified that USDA does not currently nor anticipates operating a computer "system", that is a unified communications network-software-hardware unit designed to meet a set specialized task. Rather, in explaining the Department's consideration of hardware separate from a telecommunications network, you have indicated that it is the Department's policy of maintaining "computer utility" where dissimilar programs could be run on any of the hardware at the proposed computer centers.

As I understand it, however, USDA operates several very specialized "computer systems". As an example, in New Orleans you have the National Finance Center. In St. Louis, FmHA has its own computers; in Fort Collins, Forest Service data is processed; in Kansas City, primarily ASCS.

It seems that if you wish to submerge these "systems" into a more homogeneous computer utility with central outlets at four or five locations, you are talking about quite a change from your current operations, a change which demands not only a comprehensive analysis of this policy direction but more particularly of hardware and telecommunications. Would you comment on this?

Mr. MEETZE. Again, Senator, I must state that "system" is a multifaceted word meaning different things to different people. For instance, Federal Management Circular 101-32 defines "system" as: "any continuing ADP and/or telecommunications work arrangement, including equipment, procedures, processes, methods, routines, and techniques united by some form of regulated interaction to form an entity."

Datamation's Automatic Data Processing Glossary defines "system" as: "an assembly of procedures, processes, methods, routines or techniques united by some form of regulated interaction to form an organized whole."

A "software system" may be a series of programs written and inter-related to perform as a complete package and is also called by some an "applications system." A "hardware system" may be a computer with its integral operating system and is also called by some a "computer system." A "telecommunications system" may be a series of interrelated communications lines and equipment joined together to perform one common service. An "ADP system" is referred to as a combination of hardware and software systems by some people and a combination of hardware, software, and telecommunications systems by others. So you see, when one uses the word "system," it must be well-defined so we can discuss from a common base. At any one computer center, we have "computer" or "hardware" systems which process a variety of "software" systems such as "payroll". This process has been going on for over 14 years on the

departmental centers and will continue in the foreseeable future. It does not represent the slightest change in operations.

#### AMS STUDY

Senator FONG. Why did USDA purchase a study by AMS which merely analyzed current need—in 1973—rather than make projections for the period in which new equipment would be utilized?

Mr. MEETZE. The AMS study was principally oriented towards the management side of data processing, but did address in numerous ad hoc reports the longer range aspects of data processing planning and requirements.

Senator FONG. During this period did USDA undertake a similar evaluation of future ADP needs for the anticipated life of new computer acquisitions?

Mr. MEETZE. No, USDA's evaluation of future ADP needs which commenced last year and is not complete was an update of previous USDA studies and was not duplicative of the content and objectives of the AMS studies.

#### FMHA PLANS

Senator FONG. Mr. Elliott indicated with respect to the FmHA information collection and processing system analysis outlined in the letter of June 13 to the committee, he "would be hopeful (that suggested system redesign) would not require . . . more computer capacity."

On what basis is this expectation that the "Unified Management Information System" will entail no increase in computer capacity? Does the RFP represent a factor which alters previous estimates of FmHA ADP needs?

Mr. MEETZE. The "Unified Management Information System" is merely a redesigned manner of accomplishing what is now being processed on the St. Louis computer. USDA projections take into consideration the normal workload growth processed by either the current system or its replacement. The RFP does not represent a factor which alters previous estimates of FmHA needs.

Senator FONG. Earlier Senator McGee requested a breakout of FmHA's computer demands as a percentage of overall USDA capacity. Will you furnish for the record a table showing current ADP expenditures by each agency within USDA?

Mr. MEETZE. Yes, sir.

[The information follows:]



AGENCY ADP FINANCIAL PLAN (USDA)

(Dollar amounts are in thousands)

	<i>Fiscal year 1975 budget</i>
USDA total.....	\$53,584
ADS.....	16,733
AMS.....	733
APHIS.....	1,156
ARS.....	2,051
ASCS.....	9,609
CSRS.....	117
EMSC.....	75
ERS.....	861
ES.....	187
FAS.....	409
FCIC.....	558
FCS.....	24
FmHA.....	1,778
FNS.....	1,515
FS.....	8,468
NAL.....	267
OA.....	172
OGC.....	6
OI.....	18
OMF.....	2,916
OO.....	265
P&SA.....	3
REA.....	261
SCS.....	2,154
SRS.....	3,248

NOTE: Information extracted from USDA April 1975 A-11 submission to OMB.

DEPARTURE OF SENATOR FONG

Senator FONG. Mr. Chairman, I really want to stay here and listen to the testimony, but I have been called to the Judiciary Committee in the executive session.

Senator MCGEE. You just got this going good. You have no right to run out on us, but I understand.

Senator FONG. They haven't got a quorum.

Senator MCGEE. This may be your shining hour. This may be more complicated than both of us.

Senator YOUNG. I have been spending my time over in the Senate Legislative Appropriations Committee. I am a bit behind on this.

Senator MCGEE. So is Agriculture, as they are red faced in a gracious way, admitting here this morning things didn't go quite right in a long period of time. In our very massive system, it is hard to hold to that kind of expectation and expect it to come out.

Why don't you start again, Mr. Meetze. Tell us what this in-house civil war is.

"SYSTEMS" TERMINOLOGY

Mr. MEETZE. The situation is really confused by the computer professionals and the people we communicate with. One of the big problems is the use of the word "system". When I say "system", I may be talking about one thing. GAO says "system", they may

be talking about another thing. When Mr. Bolduc indicated there were two schools of thought concerning communications and data processing planning, that is correct.

To give an example the worldwide Military Command and Control System is a complete system. The software, the programs were written to perform specific interrelated functions. The communications were designed to link different points together throughout the world. The computers themselves, or the hardware, were specifically acquired to support those particular software programs. So the whole thing together is a "system".

#### UTILITY CONCEPT IN USDA

That is not what is occurring in the Department of Agriculture. We do not plan such a "system". One of the concepts of that 1972 task force was that of a computer utility. This could be likened to a power utility or something of that nature.

This means that there are selective computer centers established to provide a variety of common types of services to a large number of different users. There is no requirement for a particular user, the agencies in the Department, to be doing exactly the same thing with the same programs. The Farmers Home Administration may be doing something entirely different on a computer from, for example, the Soil Conservation Service.

It is a utility concept rather than a system, as implied in the GAO report. We do now have a variety of telecommunications networks involved in the Department. These networks in a utility concept are merely means of transmitting data from one remote location to the computer, have it processed and ship it back again.

There is no complete, total system concept being pursued where all individuals perform the same function with the same software on the same hardware. Our telecommunications provide a means of routing traffic from a user at a remote location to the computer utility. So we do not have a "system", as I think is implied in the GAO report. I think that is a very big difference.

#### INTEGRATION OF DATA PROCESSING AND TELECOMMUNICATIONS

Senator MCGEE. Your response to the GAO complaint on that score is that the very core of your system doesn't have the same requirements for telecommunications that something like the Defense Department's has. Therefore, the absence of that communications system, does not pose the problem or create the gap that it would otherwise imply?

Mr. MEETZE. Yes, sir; in essence, that is correct, sir. The integration of communications and data processing does not necessarily have to take place at the same time because we do have, as I indicated, communications networks already in being right now.

We have no intention of changing those networks over the next couple of years, because there are no major additional requirements that would cause restructuring in the near future. So what we intend to do is to use those communications networks that are already in place which merely provide a path for this traffic going into the computers.

For example, instead of being able to process a thousand jobs per month the computer is upgraded which allows an agency to process 1,500 or 2,000 jobs in the same amount of time. That is basically what we are trying to do.

Senator MCGEE. You have now established that there are two schools of thought on the matter of developing telecommunications and hardware. But the GAO report suggests to me that Federal regulations require communications be developed concurrently with or prior to acquisition of hardware. I wish you would review the "Communications Requirements" section of the GAO report on pages 10-11 and respond in more detail.

Mr. MEETZE. We will be happy to, Mr. Chairman.  
[The information follows:]

#### COMMUNICATIONS REQUIREMENTS

In the "Communications Requirements" section, GAO does not fully consider the fact that the USDA computer centers have been in being for many years as have the supporting communications networks. In fact, the computer center at Kansas City dates back to 1961, Washington to 1962, New Orleans to 1967, St. Louis to 1968, and Fort Collins to 1973. From a completely practical standpoint, as I suggested previously, when USDA requires an upgrade at one center, it would seem impractical to go through the procedures suggested by GAO. GAO gives little weight to the fact that, in a computer utility environment, changes occur on an incremental basis.

#### "BRAND NAME OR EQUAL" TERMINOLOGY

Senator MCGEE. A moment ago, we were mentioning the task force that you set up, Frank, in July 1971. In their report, they came up with five alternatives for determining agency requirements and specifications. During the review of this task force report, the Acting Director of ADS suggested a sixth alternative. It wasn't recommended by the task force, but was put in there by the Director of ADS. That was the "brand name or equal" approach, because the future workload requirements were vague and unknown.

Would someone, just in five letter words, explain for the record what is meant by the phrase "brand name or equal?"

Mr. MEETZE. Sir, that means an equivalent of a particular vendor's equipment. For example, I can specify a requirement for a UNIVAC 1108 as a "brand name" or equivalent—

Senator MCGEE. A brand name or the equivalent of the standards achieved by UNIVAC 1108?

Mr. MEETZE. Yes, sir.

#### "SOLE SOURCE" PROCUREMENTS

Senator MCGEE. Is that another term for "sole source procurement," that was just heard a moment ago?

Mr. MEETZE. Sole source means going to one particular vendor and acquiring that vendor's equipment.

Senator MCGEE. My impression was that sole source generally refers to an area where there is no real competitive factor present. The specifications are so specific that you generally have the requirements met by one particular piece of equipment. We have sole source problems in other contracting categories, too.

Mr. MEETZE. For example, we do have a UNIVAC 1108 in Fort Collins, Colo. If I were to say sole source upgrade, that means to upgrade that particular piece of equipment through the UNIVAC line.

If I were to say sole source, then I could go to any other vendor non-competitively. Theoretically, I could go to Burroughs, Honeywell or IBM and acquire a particular piece of equipment from that vendor. There is a slight difference between sole source and sole source upgrade.

Senator MCGEE. Three of us on this committee—Senators Bellmon, Fong, and I—are also on Post Office and Civil Service Committee. We have similar contracting problems. Only there, we find we are in the “no source” problem, because the special requirements of mass mailing are unique to the Postal Service of the United States.

They aren't generally met by any other category. So you have to design a specialized piece of equipment. It is difficult to find somebody with either the know-how or the expertise to put it together. It is a vital difference. It is an intensification of this kind of thing. You fortunately have more sources.

#### USDA METHODS OF PROCUREMENT

Senator YOUNG. Mr. Chairman, I haven't had a chance to read the General Accounting Office report. May I ask, do you acquire computer services or equipment on a competitive or bid basis or what has been your practice?

Mr. BOLDOC. In this particular case, Senator, we are speaking of a request for proposal that is currently on the street, that encourages maximum competition on the part of computer vendors.

Senator YOUNG. It what?

Mr. BOLDOC. It encourages maximum competition on the part of the vendors in the business of selling computer hardware. It is totally competitive.

Senator YOUNG. How many competitors have you had bidding for the service? I am trying to find out whether you acquire this under competitive or bid basis or can you do it that way?

Mr. BOLDOC. That is the way we are doing it, sir. You can do it that way.

#### NUMBER OF BIDS SUBMITTED

Senator YOUNG. Have you had many competitors?

Mr. BOLDOC. The confidentiality of a procurement of this nature does not permit me to indicate the extent to which—

Senator BELLMON. Not even the number of bidders?

Mr. BOLDOC. No sir, I don't believe so.

Senator MCGEE. That is part of the controversy over the phrase.

Senator BELLMON. Who put together these kinds of rules? Who made up that rule?

Mr. BOLDOC. I don't know who specifically made it up, sir; but I do believe—

Senator MCGEE. Would you believe Mr. Copen? He isn't here anymore. Everything else this morning has ended up in his lap.

Mr. BOLDOC. I would suggest, if you care to, you may want to address GSA representatives here today on this matter. They have

the delegation of procurement authority. Any action having an impact on this procurement must first be cleared through General Services Administration. I would not want to provide you with this information without first conferring with GSA, sir.

Senator MCGEE. We will, indeed, follow that up.

Mr. BOLDUC. They may wish to tell you how many vendors are involved, I don't know.

Senator YOUNG. Can't you in the Department ask for bids on services or equipment such as this?

Mr. BOLDUC. Yes. We have requested through the request for proposal that is currently on the street submissions of proposals by interested vendors.

Senator MCGEE. This may not be our jurisdiction, gentlemen. Don't tread on this secret field because this may belong to the CIA Committee. [Laughter.]

Senator BELLMON. Do you know how many bidders there were?

Mr. BOLDUC. Yes, sir, I do, only because I happened to be the Acting Director for the Office of Automated Data Systems at the time the vendor proposals were submitted.

Senator BELLMON. How did you find that out, if this is such top secret information?

Mr. BOLDUC. As Acting Director of the Office of Automated Data Systems, I was apprised as to how many vendors were involved because of my role as the source selecting official.

Senator BELLMON. I am serious about a set of rules that you know, but don't let the members of the Senate know.

Mr. BOLDUC. We were advised by the General Services Administration that circumstances surrounding the submission of proposals, the number of vendors, who was involved and the nature of the proposals were not for discussion during the evaluation process.

Senator BELLMON. Those are pretty high-sounding words. I don't know what they mean.

Senator MCGEE. What they really mean is UNIVAC, Burroughs, and Honeywell. [Laughter.]

Senator BELLMON. Now we know.

Senator MCGEE. We reserve the right of the Secretary to review the hearing record to see whether there are portions of it that ought to be deleted for national security reasons. [Laughter.]

#### BRAND NAME OR EQUAL APPROACH

A part of the problem that arises here, gentlemen, is the "brand name or equal" approach. How did that get into the act after the task force got out of the act? They made their recommendations. I guess this approach is designed to achieve anonymity. Was that when you were still in there, Frank?

Mr. ELLIOTT. When you discuss the "brand name or equal" approach, you have to put the name of a vendor or an equal approach sign. All the vendors have similar processing speeds and characteristics. You cannot and will not prejudice a bid by using a name brand because you indicate an individual corporation at the time and/or equal.

So when the suggestion was made, it was turned down basically because you can compete in the market against the characteristics of equipment. I was not about to prejudice any bids.

Senator MCGEE. In other words, you were trying to avoid free commercials?

Mr. ELLIOTT. I was trying to stay away from identifying any potential sources.

Senator MCGEE. You don't consider "brand name or equal" a procedure that would downgrade, in any way, competitive procurement processes? Your point is that it would enhance them?

Mr. ELLIOTT. I eliminated the use of any brand name or equal because you have to name a company or a piece of equipment of a given company and then say and/or equal. The point is, to do that can be prejudicial and almost indicative of sole source, whereas you can also request the performance characteristics that almost every major vendor is competent to deliver on an equal bid without the prejudice of a brand name.

Senator MCGEE. I think I understand that answer and appreciate it, for in my boyhood anything that you plugged in and put ice cubes in was a Frigidaire. That is what we knew in our area. It is possible to understand those ramifications.

On page 9 of the GAO report it is stated:

In February 1973 USDA informally asked GSA's opinion and reaction on a proposal to acquire on a sole-source basis, IBM 370-168 systems for four departmental centers. Mr. Elliott just stated he did not approve a sole-source procurement.

Who in USDA requested consideration of a sole-source procurement by GSA?

Mr. BOLDOC. Senator, several times in our discussions the use of the words "sole source" have been made. I would like to make it clear that no one in USDA has ever seriously thought in terms of sole source procurement by either GSA or USDA. What is usually meant when this phrase is used in either the GAO report or our discussions is a method whereby an agency specifies the particular manufacturer's name and the model of the computer hardware requested but using a competitive procurement whereby any third party broker who can acquire this specific equipment may bid on the open competitive procurement offering the least price to the Government. At the present time USDA has at least two large computer hardware systems which have been acquired by specifying the particular manufacturer's name and model but which were acquired on the open market through the competitive process thus saving the Government hundreds of thousands of dollars over the "sole source price." Dr. Melvyn R. Copen, previous Director of the Office of Automated Data Systems, was the official in USDA who requested consideration of GSA of this competitive procurement specifying the brand name and model number.

Senator MCGEE. What is meant by the term "informally" in this case and precisely what was involved in this informal inquiry?

Mr. BOLDOC. The term "informally" in this case refers to the request on the part of Dr. Copen for a meeting with officials of the GSA procurement division to discuss whether or not the GSA officials believed that the method of specifying the model number and manufacturer's name for a particular hardware computer system would

be acceptable to GSA and if such were the case what kind of documentation and formal request would have to be made by USDA to GSA to proceed with this type of procurement. It must be borne in mind, Senator, that at this particular time two large systems existed in Agriculture having been obtained through this perfectly legal and appropriate procurement method. Many other systems exist throughout the Federal Government having been acquired through the same appropriate procurement methodology.

#### DEPARTMENTAL CENTERS

Senator MCGEE. That GAO comment makes reference to "IBM 370-168 systems for four departmental centers." Is this consistent with earlier testimony that no systems are involved, that you are simply acquiring hardware to upgrade present equipment?

Mr. BOLDUC. In the context which the phrase "IBM 370/168 systems for four departmental centers" is used is totally consistent. Computer personnel frequently interchange the words "hardware" and "IBM 370/168 systems" to mean the computer hardware and the necessary software or computer programming to make it operate internally. There is no reference to any applications programs involved in this terminology.

Senator MCGEE. Why was IBM equipment specified in that sole-source inquiry to GSA? Do you presently have IBM equipment in those four departmental centers?

Mr. BOLDUC. At the time it was felt to be most cost beneficial to at least explore the alternative of attempting to satisfy the USDA needs by replacing present IBM equipment with additional or larger IBM equipment to avoid significant conversion costs to other manufacturer's equipment. At present we do have IBM hardware in three of the four specified departmental centers.

Senator MCGEE. If that sole-source inquiry to GSA has been approved and if you had proceeded along that line would you have ended up with IBM equipment in all four centers?

Mr. BOLDUC. In all likelihood we would have ended up with IBM equipment in all four centers though not necessarily the same size or quantity of equipment in each center. Once again, I would like to point out that under no circumstances had it ever been contemplated to acquire this equipment through sole source procurement methods, but rather through the least cost competitive biddings offered by the entire industry capable of supplying the equipment.

#### TRANSFER OF ASCS SYSTEMS STUDY PERSONNEL

Senator MCGEE. The GAO report indicates that the only agency within the Department of Agriculture that had conducted a thorough systems study and determination of requirements was ASCS. On April 1, 1973, 18 employees of ASCS's ADP Division were transferred to the central office to assist in developing the departmentwide program. Were these 18 employees of ASCS the same individuals who prepared the program for ASCS?

Mr. BOLDUC. I could not comment as to whether or not all 18 were involved, but a good number of them; yes, sir, were involved.

ASCS REPORT

Senator MCGEE. What was done with the report that was prepared by ASCS for its agency needs? Was it ever approved for the Department?

Mr. BOLDUC. It was considered a starting point, Mr. Chairman, which formed the basis for additional studies and adjustments in order to determine the Department's requirements before going forward with the request for proposal.

Senator MCGEE. Does that mean it was approved?

Mr. BOLDUC. I would say, for all practical purposes, yes, sir, it was approved in the sense that it formed a part of the Department's overall needs; approved in the sense that ASCS could make their own individual procurement; no, sir it was not approved.

Senator MCGEE. The report of the GAO suggests that this was the most thorough systems study that was in existence.

Mr. BOLDUC. I would agree with that.

Senator MCGEE. We had the best, most thorough system going in ASCS, according to the report. That generally was the opinion in the Department, as I understand it.

As a result of that, some of the employees, 18 in number, were pulled out of that program and transferred to the central program. They were asked to have their professional input into the RFP. Was that RFP prepared by them approved or not approved?

Mr. BOLDUC. Sir, let me place that—

Senator MCGEE. We are trying to get the status of what was regarded as a thorough systems study in the ASCS.

Mr. MEETZE. Sir, may I address that?

Senator MCGEE. Yes, please.

ASCS "SYSTEM" AND STUDY

Mr. MEETZE. The ASCS did a very detailed study for their system requirements. Again, I have to define systems because we are using it in several different contexts. The context in which "systems" is used is similar to that described for WWMCCS. As an agency, they had their own computer center. They had developed a system which included hardware, the computer itself, the communications and the terminals. That is all that computer would be used for and that is all the communications network would be used for.

The Department's centralized management policy came into effect shortly thereafter. That particular computer center which had essentially the same equipment as now, came over to the Office of Automated Data Systems. The systems study that ASCS did revolved around a particular size of computer; that is, the majority of the work that they planned would be processed by same computer. It is this computer which would be installed in Kansas City should this procurement go through.

ASCS is one of the very few agencies that has a system, in that context, that is that large. FMHA, for instance, is considering a system that large; but the majority of the agencies do not have a system that will use up a whole computer. They have systems that consist of many small number of programs and a large number of these systems can run on one computer. But there is an entire difference



of magnitude between what ASCS was doing and what other agencies were doing.

RELEVANCE OF APPLICATION OF ASCS SYSTEM TO TOTAL USDA

Senator MCGEE. Then you had a thorough systems operations going in ASCS. But in terms of the much larger departmental requirements, it was limited in its validity. You could not transfer the expertise from that into the central headquarters?

Mr. MEETZE. No, sir. The expertise—

Senator MCGEE. That is my word. I withdraw that word. Say that the application of that particular system would not be possible, considering the total diversity of the Department as a whole.

Mr. MEETZE. No, sir.

Senator MCGEE. That is more words than it takes to say what I misstated in the first place.

Mr. MEETZE. The types of functions that were being performed within that system were representative of work that was being performed in other agencies. For instance, there was a lot of reading of different records from, say, magnetic tape, that is—input and output. That function is similar to a lot of other work done in other agencies. They had a certain number of arithmetic processes required for a particular program. That was similar to functions of other smaller systems and programs being run in other agencies.

So ASCS work did represent the types of processing that a large number of agencies were doing but in smaller scale. The ASCS expertise was used to assist in writing the RFP and in developing a base line for measuring computer equipment, called a bench mark. So their expertise was directly transferrable.

CHRONOLOGICAL HISTORY OF USDA OFFICIALS IN OFFICE

Senator MCGEE. I want to try to keep our chronology in perspective, if we can for the overall record. By April 1, 1973, Joe Wright, Jr., had assumed the position of Assistant Secretary for Administration. Mr. Bolduc, what was your position, if any, at that time?

Mr. BOLDUC. I was Assistant Regional Inspector General in Charge of Investigations and Audit, for the northeast region with the Office of Inspector General.

Senator MCGEE. Wow.

Mr. BOLDUC. That sure is a mouthful. [Laughter.]

Senator MCGEE. It sure is. That means you were based out of New York at that time?

Mr. BOLDUC. Yes, sir.

QUALITY OF ASCS STUDY

Senator MCGEE. Let's go back to what Mr. Meetze was just telling us about this ASCS systems study. In your opinion, what was the quality of that ASCS systems study?

Mr. BOLDUC. I think it was very good. I think this opinion has also been verified by the results of a GAO evaluation of the study. The mere fact that it formed a starting point upon which the entire department's study eventually evolved demonstrated the fact that it was good.

Senator MCGEE. When we were trying to collect our major agenda items for this hearing, Joe Wright told us by telephone that the ASCS group did a lousy job. The "lousy" is the precise, selective word. He said that the ASCS reports and recommendations were of very poor and unprofessional quality. This led to other problems as a result.

It comes back to where we are in terms of the GAO report and the departmental judgment on how we ought to proceed, on what is going to happen when we all sit down cozily the last week in June, if that, in fact, happens.

It is an illustration of the sort of thing that begins to creep in upon us here, underscoring that something is misfiring somewhere there. We have got to make sure as a committee of the Congress, what the situation really is.

Mr. BOLDUC. Mr. Chairman, I hope that Mr. Wright is being quoted correctly. If he is, then I suggest, sir, that you discuss that particular quote with him.

Senator MCGEE. We tried our very best. He chose to go to Venezuela this morning. We will get him back. We intend to do that.

#### HOW AND WHEN TO PROCEED WITH PURCHASE

I wanted that on the record, to show you why we are troubled by this. We have a reason for being here this morning, instead of waiting for another committee meeting by somebody else, on down the road ahead. What is involved is a basic decision as to how and when you are going to proceed on half-a-billion dollars' worth of equipment.

It is a very serious question. It is plenty serious for you. With your professional expertise in all this business, you understand what that means. But for us it means the buck that we have got to explain to the taxpayers. That is the reason for this tortuous experience here this morning. It is a foreign field to us, or to most of us.

We have the solution to the farm problem. But when you get into the technology of a communications and data system, it is another matter with us. That is the reason we want to make sure we are working in an atmosphere of reality.

It is a matter that we will have to go into with Joe and pursue that with some depth.

#### LENGTH OF TIME ASCS GROUP SPENT ON THEIR REPORT

Prior to the transfer to ADS on April 1, how much time did the employees that were borrowed from ASCS take to develop their report on the needs?

Mr. BOLDUC. Do you mean sir, while with ASCS or after they came to the OIS?

Senator MCGEE. Before, when they were putting together the ASCS systems report.

Mr. BOLDUC. Frank, you might have a better feel for this than I. It was not done overnight. I would suspect that it was a rather comprehensive, long-term evaluation.

Senator MCGEE. Check back on that and we will slip it in the record, if you could. I think it would be helpful to fill in that little gap.

[The information follows:]

The ASCS Study Team started work on developing the RFP in early 1971 and completed the final draft in late March 1973 just before coming to ADS.

#### SHORT DEADLINE GIVEN FOR PREPARING DEPARTMENTAL REPORT

Senator MCGEE. The GAO report on page 9 indicates that these employees were told to complete the departmental report within a month after their transfer. You won't know yet whether that is the case until you can check on the other interval of time for the record. But it would strike me as a rather short period of time.

Mr. BOLDUC. I was not there at that time sir. I could not state with any degree of accuracy as to what was told to them. I can speak from factual evidence though, that the RFP that eventually went to industry was not released until February 1974. What may have transpired in the interim, in private conversations, and the like, I am not aware of. I would say that if they were told to put that "package" together within 1 month, they were being quite unreasonable.

Senator MCGEE. That is a pretty short interval, I am told. We will have occasion to check that through and expand, the record on that, too.

#### ASCS RFP USED AS BASIS FOR DEPARTMENTAL RFP

The report also charges that due to the short time allowed for the work ADS used the ASCS November 1972, Request for Proposals as a basis for the departmental RFP. It further charges that there was no documentation showing the rationale or methods used for the modification of the ASCS request to that of the department-wide document.

That is what we were beginning to allude to a moment ago, when we were talking about how much of that you could lift out and reestablish as having validity.

#### DOCUMENTATION SUPPORTING USDA ACTIONS

Mr. BOLDUC. Sir, I think what you said earlier is not unlike what I have said. It was used as a basis. I think the statement that there was no documentation supporting the actions we took, is not a proper one. If you would like us to, I would be happy to furnish for the record whatever documentation existed at that time the decision was made to release the RFP.

Senator MCGEE. That would be helpful, if we could get that on the record.

[The information follows:]

This summarizes the major factors considered by ADS in the development of the workload presentation for the Departmental RFP. This work was begun in March 1973 when the decision was made to centralize Departmental ADP. The approach taken by ADS was, where possible, to build upon the work done by ASCS in preparation for their own RFP. In those cases where previous work done by ASCS was utilized, this description includes that earlier work.

1. Representative Job Categories

The workload had to represent a composite of all types of jobs required by any agency in USDA in order to validate the vendor proposed software.

The ASCS workload data was representative of a large data base environment and was thorough in its inclusion of transaction processing and both local and remote batch data base oriented jobs. The following changes were made to include a wider range of job types to accommodate needs of other agencies.

- a. A more complex demonstration of scientific processing was required for agencies such as ARS and Forest Service. Several programs were added to the live test demonstration (LTD) to validate the equipment mathematical precision capabilities and the FORTRAN compiler performance. These programs were supplied by the Forest Service. Six programs were added. Subsequently, one had to be dropped because it wasn't working properly.
- b. The category of interactive processing was added. ASCS originally had not planned to provide this capability at its ADP center and had omitted it from the tests. It represents a major requirement on the part of the other agencies. The interactive workload is now represented by Data Base Management System (DBMS) inquiries and COBOL, FORTRAN and BASIC program development statements.
- c. Conversational Remote Job Entry (CRJE) workload category was added to prove the software capability to initiate a batch job from an interactive terminal. This was accomplished by transferring seven of the remote batch jobs to the CRJE category.

2. Workload Growth

The decision was made to perform a detailed analysis of the workload in terms of the kinds of jobs to be processed and their volumes for year one and apply a growth factor to those statistics for each year of the eight year system life.

This is a traditional approach used in large procurements and was considered equally valid for the USDA procurement. It was recognized that during the eight year system life, the workload breakdown by job category would vary. For example, more program development would be required in the early years, more operational type functions later. However, when the Department requirements are considered as a whole, the differences are minimized. Additionally, it is impossible to measure accurately the timing of such variations when considering four centers and all users. In

any case, any variation that might exist would not be sufficient to affect the equipment proposed by the vendors.

The actual growth factors developed by ASCS were not valid for the total Department. The ASCS workload growth was developed from the Quantification Study which provided a detailed analysis of their total data processing requirements based on their agency renewal plans. This resulted in a growth over the eight years of 150 percent. The ASCS growth pattern was irregular in that there was an expected spurt between years two and three when the pilot was fully operational and a second one between years four and five when the full network system was to be implemented.

When the RFP was rewritten for the entire Department, the growth curve developed by ASCS could not be used. A decision was made that since the various agencies within the Department had differing rates of change in their data processing requirements, the average was most likely to be represented by a constant curve. It has been demonstrated in the past that from one year to the next, some agency programs increase while others decrease. A constant growth curve would therefore be a more accurate depiction of the total Departmental requirements.

A decision had to be made as to what factor(s) should be used as a measure of workload growth. The most representative was determined to be the total number of jobs executed. Data was available from WCC for each year since 1964. Since WCC is the largest computer center in USDA and it supports many agencies, it appeared that a projection of the WCC growth curve would be most representative. A curve projected from 1964 to 1982 resulted in a threefold increase from 1975 (year one) to 1982 (year eight). This projection was considered unrealistic because it was affected by the rapid increase experienced in the past with the introduction of a data processing capability. A growth of 100 percent over an eight year period was established as more representative for the Department as a whole. This was based on several factors.

- a. Approximately half the Departmental ADP is done on non-USDA computer systems at present. Some of this will necessarily continue to be done outside because of the tie in with research agreements or because of special requirements which cannot be satisfied by USDA. However, it was assumed that at least half of that done outside will be brought back to USDA centers causing a gradual growth in the projected workload. This increase applies primarily to work currently being done by the Bureau of Standards, Boeing, universities and the Infonet systems.
- b. The closing of the Minneapolis and the St. Louis Computer Centers would add an additional workload to the four proposed centers. A significant increase is expected from FNS because of the growth of the food stamp program. In addition, FmHA is not only required to support additional programs but also a redesign of their system is planned to make necessary data more accessible. The CEA work in Chicago was not factored in because there always was a question whether they could operate in a multi-user environment.

- c. Past experience tells us that we have to assume there will be some workload increase in addition to the items just covered. Some agencies are just beginning to utilize automation; others will be expanding their use. The normal tendency in this direction is increased by the availability of more capable ADP systems. This is particularly true as users move from batch oriented systems to an on-line systems approach because with the increased capability there is also an increase in system overhead.

In reviewing the factors stated above, the decision was made that a significant workload increase can be expected in the eight year system life. However, the 200 percent increase indicated by the WCC workload projected growth was too high and so the estimate of 100 percent was established based on the specific types of increased workload that could be identified. At the time the growth curve was decreased, year one was increased by about 10 percent. This was done in response to the concern that the workload was under estimated based on factors listed above.

A constant increase of 10 percent per year was specified which resulted in a 95 percent growth in year eight over year one. Subsequently, the workload was re-evaluated. The decision was made to eliminate any growth during the last two years of system life. This was based on the premise that most applications would have been implemented by then and if they weren't, it would be unwise for any agency to do any major development for equipment nearing the end of its useful life. As a result of this action, the total system growth was projected at about 75 percent over eight years.

### 3. Benchmark Program Functional Specifications

Benchmark programs were developed by ASCS and were used for the Departmental procurement. The rationale for utilizing the ASCS program is of importance here because it demonstrates why programs developed for the ASCS procurement were equally applicable to the Departmental procurement.

When ASCS was preparing an approach to defining vendor equipment demonstrations, it was recognized that since a total system redesign was planned, no programs existed that could be considered representative of the ASCS requirements. It was therefore necessary to design artificial programs. These programs are completely application independent with each one representing a single basic computer process (such as the access of a keyed record from an indexed sequential file). It is the specific combination of these programs that can be modified to represent any environment. The Department position was the same as ASCS in that there was no set of programs that could be measured and considered representative. The ASCS programs were written, documented and almost completely tested and were therefore chosen to be used as the basis for the USDA procurement demonstration requirements. The use of synthetic benchmarks is a new technique that is gaining wide support in the Federal Government. The Bureau of Standards is working with a committee to study and adopt this procedure.

The programs specified in paragraph 1 of this attachment were added to the basic set developed by ASCS to support the more inclusive demonstration requirements of all agencies.

4. Quantification of a Center's Workload

The next step was to develop a method to quantify the workload of a center in a way that can then be related to the benchmark problems. The question again arose as to whether we should have one set of statistics to represent all centers or develop separate ones for each center. The decision to have only one set was made primarily for the following reasons.

- a. The philosophy behind centralizing ADP within USDA was based in part on the need for flexibility to respond to individual agency fluctuations (both up and down) in requirements. To do this, the Department, where possible, would encourage agencies to move new major processing to the center that is most able to support the workload. Since centers would not be dedicated to any particular agency and an even distribution of work would be a goal, one set of workload data was appropriate.
- b. Washington Computer Center, in its current operation, more closely resembles the future centers because it has more up-to-date equipment and the capability to support third generation applications. As a result, WCC was really the only center to have representative workload data.
- c. The decision to use a single set of workload statistics would not preclude us from varying the equipment configuration (within limits) or the operating environment of any center.

The units of measurement established to quantify workload were based on those provided by the operating system at WCC. These are billable CPU minutes, core utilized and Immediate Access Storage (IAS) accesses (EXCP's in IBM terminology). Statistics were accumulated for the 12 preceding months for the three computers that were at WCC: 360/65, 370/145 and 360/40. Since the work then at Beltsville on the 360/50 was to be added to the WCC responsibility, data from its operation was included. To develop a single number, the statistics for all were converted to 360/65 equivalence. This provided us with a measure of certain quantifiable elements of work (CPU time and data accesses) for the 12-month period which was then projected to 1975 based on the WCC growth curve.

We considered using quantification estimates from agencies instead of a center but very few have any and where they exist, they are not sufficiently standard to be combined. Forest Service and ASCS had done more work in this area because both agencies had expected to acquire their own ADP centers. Whatever basis was chosen for developing workload quantification had to consider the need to relate that quantification to the specific benchmark programs.

5. Gross Workload Relation to Benchmark Programs

Following the development of the workload quantification statistics, it was then necessary to relate them to the

specific benchmark programs to establish the desired mix. This mix was to be a composite of center activity and not representative of any single center. The major statistics were gross billable CPU (time utilized by user programs) and tape and disk accesses. This total had to be distributed in a representative fashion among the programs.

This phase of the LTD development required more judgmental decisions of a technical nature because of the unavailability of meaningful Departmentwide data.

- a. What portion of the workload should be allocated to each of the processing categories?

The following distribution was established:

Batch	<u>75 percent</u>
Local	25 percent
Remote	46 percent
CRJE	4 percent
On-line	<u>25 percent</u>
Transaction	23 percent
Interactive	2 percent

The distribution between batch and on-line was based on the WCC data. The workload allocation involved, in part, our best estimate of the needs of USDA. It also involved the realities of what can be required of the vendors with the limitations of a demonstration in the general area of communications.

The interactive processing properly required a terminal and an operator. It is therefore difficult to simulate a large volume. We were able to develop a simulation technique for some of this processing but it is limited. Transaction processing did lend itself to such techniques so we increased that to represent the volume we could not achieve under interactive.

Both types of processing are required to enter the ADPS front-end through its communications interface. The remote batch is probably understated in terms of total batch but it, too, is difficult to simulate in large volumes in a demonstration environment.

- b. What mix of programs is representative within each category? The distribution varied according to the program itself. For example, more executions of the simple query and update programs are required than of those that require extensive file searches or reports generated. The accesses and instruction executions for each program were computed and related to the total desired for the category. Multiple executions of batch programs were specified to reach the desired total. The bulk of the interactive program development statements were divided between COBOL and FORTRAN under simulation techniques to represent 20 terminals operating concurrently. The RFP requires 30 in year one and 99 in year two. However, since, as stated, this was a composite workload, we felt that a center



having so many interactive terminals would not also have the other processing represented in the LTD operating concurrently. The inclusion of sorts was limited, again because of the difficulty in demonstrating it during a short test. However, enough was included to assure a test of the software capabilities.

- c. How should each program parameter be set? The synthetic programs are each fairly basic in its operations. In order to increase the size and the number of instructions executed, parameters were included in the design to modify these variables. The combination of the number of executions of the programs and the setting of the parameters had to compute to the gross workload statistics previously developed.

#### 6. Standard Peripheral Requirements

The major peripheral is the disk storage. The decision was made to require that it be removable to provide the flexibility to maintain on-line only those files currently accessed. Originally, the plan was to split this, but because of the operational problems of supporting multiple types of disk, it was specified as all removable. The quantity was again based on a compromise. ASCS expected to require at least 20 billion characters for its data; WCC projected a requirement greater than 20 billion characters; both FMHA and Forest Service were planning large data bases. The decision was to require 6 billion characters with the ability to grow to 20 billion if necessary as a reasonable compromise position. The 6 billion was based on estimates of what a center (either a generalized utility as WCC or a large data base oriented center as KCCC was expected to be) could efficiently utilize the first year.

The local print requirements were based on both WCC and KCCC past experience.

Card reader and punch requirements were limited and therefore were set at a minimum with redundancy.

Magnetic tape requirements were based on current use and reasonableness for a balanced total system of the size projected. The major portion of the proposed tape drives are to be state-of-the-art with a few providing compatibility with current required interfaces within and outside USDA.

#### 7. Workload Validation

After all else was completed, validations of the final set of requirements were made.

One concern was whether the programs themselves were oriented to a single vendor. We were particularly concerned about whether the loop parameter in the programs would give unfair advantage to vendors with high speed cache memory. We were also concerned about the file organizations and data definitions and any advantage to character machines over word machines. We met with ADPESO which is the office responsible for Navy ADP procurement and asked them to review our specifications. Paul Oliver, Director

of their Software Division, is responsible for COBOL validation testing for the Federal Government and is active in the task force to develop synthetic benchmark tests. He reported back that they saw no problem as long as we allowed vendors to modify file data definitions.

The entire workload development was done without regard for any particular vendor or his product line. When the package was completed, we attempted to further validate it by determining what computer each vendor would propose. We supplied the information to the Federal Simulation Center for analysis. We also did a hand calculation for our own analysis. FEDSIM used simulation techniques. The results of the two were about the same. The results showed that the initial configuration called for a system that would be slightly greater in capacity than the single 370/168 currently at WCC. The estimation included a system overhead of 100 percent. For this type of environment that is probably low. However, since communications is limited in the LTD, certain other overhead requirements such as security were omitted, and the fact that the vendors had sufficient time and incentive to fine tune their performance thereby eliminating much overhead, we felt this was a reasonable assumption.

In trying to represent actual workload requirements for a vendor demonstration, there is always the question of the extent to which the vendor can artificially improve performance beyond that which can be expected in normal operations.

American Management Systems did a detailed study of one major program because it represented a large part of the batch CPU minutes. The results of their study indicated that our analysis of the effect of the program execution on requirements was correct.

S. Dual Processor Configuration

The decision was made to require dual processors at each center to provide each center with the reliability that comes with this configuration. The philosophy of load leveling among centers is realistic when planned in advance and will be accomplished administratively. The most critical work is dependent upon large data bases that are not easily maintained at multiple locations or transported easily when a center goes down. The decision was made that two smaller processors would better meet our requirements than one larger one.

An additional benefit arises in that a smaller center could initially take delivery on only one of the CPU's until such time as the second is needed and maintain complete program compatibility in relation to its users and the other centers.

10 MONTH PERIOD BETWEEN TRANSFER OF ASCS PERSONNEL AND  
ISSUANCE OF RFP

Mr. BOLDUC. I might say that from the period of time that the ASCS employees were transferred to OIS, which I believe was April of 1973, to the time the RFP was released, there was an approximate 10-month interval of time.

There was some give and take I am sure. There were some adjustments made. Additional data was gathered. Although the statement you made regarding the 1 month deadline may very well have been made, it certainly was not an overnight decision.

SYSTEMS AND ECONOMIC STUDIES MADE

Senator MCGEE. The report suggests that there were no systems or economic studies made to consider the cost alternatives of the number of centers or locations. The report states, and I quote from it exactly:

Consequently, there was no consideration of the potential savings if only one, or two, or three centers were established; or of the optimum of geographical locations or centers in terms of costing the minimum required in order to do the job that had to be done.

What consideration, if any, was given to the establishment of various centers, other than the four or five which are considered in the RFP?

Mr. BOLDUC. I will address the first part of that question. Then I will turn it over to Mr. Meetze for the second part.

At the time the request for proposal was released we had three computer centers in existence. We had the Washington Computer Center, which serviced largely USDA agencies within the Washington area. We had the New Orleans Center, which derived approximately 70 percent of its workload from the New Orleans Finance Center which is located in the same building adjacent to the computer center.

We had the Kansas City Computer Center, which derived most of its workload from ASCS and was also located in the same building. We had machinery in place. We had people in place. We had the needed physical layouts. We had already incurred costs to develop sites in terms of needed flooring construction. We subsequently expanded our facilities to the Fort Collins Computer Center. This building had been constructed by the Forest Service and was available. We needed a computer facility to service the northwest, and we capitalized on what already existed.

I suppose one could sit down and cost out the alternatives and benefits of having more or less than four centers. There are many other factors, however, that need to be considered beyond just dollars. First, we have about 100 people at some of these locations. We are talking about taking those people and doing something with them. Either transferring them elsewhere or not making a job available to them and contributing to the unemployment rolls.

We are talking about moving equipment, programs, and records, which is a massive problem. There are many other factors above and beyond just cost benefit. Now, I would like to turn it over to Hank.

Senator MCGEE. The only time those costs aren't very high are when you move them to Laramie, Wyo. or Grand Forks, N. Dak.

NUMBER OF CENTERS

Mr. MEETZE. The issue of the numbers of centers will be addressed in the study. However, I would like to state that I believe that the issue of the number of centers is not dependent on the type of equipment that we are acquiring and the size of the equipment that we are acquiring, because the numbers of centers can be changed at any time regardless of the type of equipment and the amount of equipment at each center. I believe it is a separate issue. The Washington Computer Center, for instance, gets about 95 percent of its workload within just a few miles of the beltway.

That is our largest computer center. On the surface it would seem illogical to move that particular site any place else. The New Orleans Center has been in place since 1967.

It gets 70 to 75 percent of its workload with people in the same building. Again, it would seem illogical to consider movement of that particular computer center.

The one in Fort Collins, which is the most recent one. It was established in 1973. The location was selected geographically through a study done by the Forest Service to determine the most cost effective location to support the Forest Service. Actually the location came out to be somewhere in the Denver vicinity and Fort Collins was selected.

Most of the work at the Fort Collins Center is performed for the Forest Service, some 80 to 85 percent. Within the center at St. Louis, all of its work is done for Mr. Elliott's agency and they are located in the same building. It would seem illogical to consider moving that particular center.

Kansas City, which is the last one, services principally ASCS and FCIC. They are located in the same building as the center. Their communications network, were it to go into place several years down the road, would in actuality be centered around the Kansas City Computer Center. So Kansas City would be a centralized location.

But again, the numbers of centers, I believe, is a separate issue from the amount of equipment to be acquired. At any time we could develop a study to determine whether or not it would be more cost effective from a departmental standpoint to close down one of those centers and move its equipment to another center and support all the activity from that other center.

Senator MCGEE. There must be an optimum number of centers, beyond which it would not be expeditious or economical or effective to go, somewhere beyond where you are now and maybe a little more. I suppose you get that with experience, once you get the new system going?

Mr. BOLDOC. Our plans, Mr. Chairman, are not to expand, if that is what you are concerned with. It is not to expand the number of sites. We felt that the GAO report primarily addressed itself to a possible reduction of centers.

We do believe that the four center concept is cost effective. But the results of our studies will provide cost data in that connection.

POSITION OF MR. BOLDUC AT TIME RFP WAS ISSUED

Senator MCGEE. The RFP was finally released to the industry at the end of February 1974, a little over a year ago. At that time Joe Wright was the Assistant Secretary for Administration. By that time, what would your position have been?

Mr. BOLDUC. February 1974, I was Deputy Assistant Secretary for Administration. I came on board at the end of February.

Senator MCGEE. You were in Washington?

Mr. BOLDUC. Yes, sir.

AMERICAN MANAGEMENT SYSTEMS REPORTS

Senator MCGEE. In January 1974, less than 2 months before the RFP was released to the industry, the Department awarded a contract to American Management Systems, Inc., covering a number of subjects. The contract included a review of the proposed ADP equipment, RFP and USDA agencies and ADP requirements.

American Management Systems, in fulfilling the contract, issued four interim reports, the last one being in May 1974. Could you supply, for the record, the dates of the other interim reports made by them?

Mr. BOLDUC. Do you just want dates or copies of the reports as well?

DATES OF REPORTS

Senator MCGEE. The copies of the reports we wouldn't make a part of the record. If we could have the reports, they would be filed with the committee. We would like to have a chance to review those, too. But the dates for the moment are needed in the record.

[The information follows:]

AMS REPORTS

The following is a list of AMS reports and dates:

AMS REPORTS - UNDER BASIC CONTRACT

ADP Plan Review Project Status Report - Feb. 26, 1974

Procurement, Installation and Conversion to New Computers  
at the USDA Computing Centers - March 28, 1974

USDA/GSA Hardware and Telecommunications Procurement  
RFP Analysis - April 3, 1974

Recommendations Planning and Budgeting for ADP - April 8,  
1974 - Copy 4A

Recommendations Planning and Budgeting for ADP - Revised  
April 22 - Copy 2E

Office of ADS Organizational Analysis - April 15, 1974

Evaluation of Kansas City Computer Center - April 22, 1974

USDA ADP Budget Estimates - FY 75 - FY 82 - April 24, 1974  
(2 copies)

ADP Utilization in the USDA - May 3, 1974

Framework for Budgeting, Accounting and Planning of  
ADP in the USDA

Evaluation of St. Louis Computer Center - May 13, 1974

ADP Plan Review Project - Final Report - May 30, 1974

Proposal to the Office of ADS of the USDA - June 10, 1974

AMENDMENTS

Papers Delivered Under the Amendment to Contract #12-01-04-5-500

USDA Applications System Survey

Various versions of the Survey worksheets and instructions.

USDA Application Survey Data Base System

USDA Application System Survey Data Base (Draft)	August 2, 1974
System Concept for the USDA Application Survey Data Base	not dated
Detailed Design Paper for the USDA Application Survey Data Base	October 11, 1974
Detailed Design Paper for the USDA Application Survey Data Base	November 27, 1974

Site Sizing Analysis System

Evaluation of the Data Base Design Model System	not dated
System Design of the Site Sizing Analysis System	October 3, 1974

Rationale for the Development of a Special-Purpose Site Sizing Analysis System November 14, 1974

Management Summary of the Site Sizing Analysis System not dated

System Design of the Site Sizing Analysis System November 27, 1974

USDA ADP Procurement

Rationale for the USDA ADP Procurement October 24, 1974

USDA ADP Procurement Cost Estimates September 10, 1974

USDA Procurement Strategy Paper November 6, 1974

Systems Programs Office (SPO)

Office of Automated Data Systems August 6, 1974  
Systems Program Office  
Organization and Task List

Miscellaneous Papers

Automated Project Scheduling Systems Recommendations July 19, 1974



PURPOSE OF AMS CONTRACT

Senator MCGEE. Since this contract was awarded to AMS to review these matters, why was it necessary or proper to proceed with the release of the RFP in February, without having all the reports and recommendations of the American Management Systems?

Mr. BOLDUC. First of all, the American Management Systems Inc. was brought in principally to revalidate the centralized concept.

Senator MCGEE. Revalidate?

Mr. BOLDUC. Reevaluate. We had received input from USDA agencies, who prior to the centralized concept, had their own computers and were operating independently, raising questions as to whether or not centralization was the proper direction to go, how we should be doing business, and things of that nature.

During the course of the next 3 or 4 months AMS provided us with reports which showed, among other things, that the original study which was conducted by the Department, would need to be reevaluated, adjusted, and certainly updated.

We went ahead with the RFP, if you will recall, in February 1974. That RFP was part of what has now been labeled FEDNET. This was a joint procurement with the General Services Administration.

We were not alone in that particular procurement. GSA had the delegation of procurement authority. We were a part of that total procurement. We went ahead with the RFP primarily because we felt the study was sufficiently adequate to justify our position.

We recognized that the departmental workload would increase or perhaps even decrease, but we felt that there was sufficient flexibility in the RFP to permit us to make needed adjustments based upon the results of any updated study.

We also considered at this point in time, the possible time delay of not moving ahead. We had an ever increasing workload that needed to be responded to. We had flexibility in the RFP. Based on those considerations we felt we ought to move ahead as it was in the best interest of the Government to do so.

GAO REPORT REGARDING AMS FINDINGS

Senator MCGEE. On page 5 of the digest of the GAO report, it is stated, and I quote:

According to Agriculture's consulting firms, existing equipment at three departmental centers of the firm visited was adequate. Whereas, equipment meeting the requirements and requests for proposals would provide considerably more computer power than Agriculture needs.

Does that statement refer to the studies made by AMS? I am trying to get at this, since I want to know where these roost.

Mr. BOLDUC. I suspect it does sir, but I am not certain as I did not write the GAO report. I would say it does refer to the AMS studies.

Senator MCGEE. We will check with GAO on that to make sure. We want to try to pin that down.

Mr. BOLDUC. Mr. Chairman, do you want me to respond to your question with that assumption in mind or would you rather clear it with GAO first and let us readdress it later?

Senator MCGEE. Let's start with the assumption that it was in the AMS report.

Mr. BOLDUC. To my knowledge, AMS was the only consulting firm we had on board at that time.

BASIS OF AMS FINDINGS VERSUS USDA RFP

Senator MCGEE. When were you advised that, in the opinion of your consulting firm, the existing equipment at the three departmental centers was adequate and that the equipment meeting requirements of RFP would provide considerably more computer power than the Department needed?

Mr. BOLDUC. That statement, sir, was made on the basis, as I understand and recall reading the report, of what was out there in the way of workload at that particular point in time. The RFP that we had on the street did not only consider that which was out there, but also considered projected future needs; recognizing we would not have delivery of the equipment on the one day and have it operational the next day. We were projecting in 1973. We are now in 1975.

The first delivery of the proposed new equipment may not take place, if we go with the contract until perhaps July of next year. I think when that statement is made it needs to be placed in perspective to when and how those conclusions were drawn.

The AMS study primarily considered the maximum configuration to be acquired and not the minimum which we believe can be acquired with the flexibility afforded by the RFP.

Senator MCGEE. Your point is that, indeed, that may be an accurate reflection of the operation at that moment. But your responsibility is to likewise keep pace with the changing requirements and the increased load.

Mr. BOLDUC. I would go as far as to say Mr. Chairman, that even today, 2 years hence, we have some computer centers that today do not have a need for additional capacity. But, I believe, they will have a need within the next 12 to 16 months.

Senator MCGEE. It is cheaper to have them now, when you are putting them in the updating round, rather than to keep adding on every fiscal year.

Mr. BOLDUC. What is important, Mr. Chairman, is accurate forecasting. While we may not have the need now, we project some need within 12 to 18 months. We will not request delivery of any additional equipment unless our needs are justified.

Senator MCGEE. On page 11 of the GAO report it is stated, "In one of its interim reports to USDA, AMS concluded that it could not verify that the agencies' requirements would be satisfied by the RFP specifications." When was that interim report received by USDA?

Mr. MEETZE. The AMS interim report was received by USDA in May 1974.

Senator MCGEE. Did you agree with the conclusion that the RFP specifications would not necessarily satisfy the agencies requirements?

Mr. MEETZE. USDA did not agree with the conclusion that the RFP specifications would not necessarily satisfy the agencies requirements. In fact, a later report from AMS dated April 3, 1975, titled "Review of USDA/GSA Interagency Agreement, Computer Hardware, Software Specifications, and Data Communications Network," states:

In general, we believe that the RFP is extremely flexible, and very likely will provide USDA with adequate computer resources for its needs. In particular, we are firmly convinced of the technical feasibility of this project, as evidenced by the requirement for vendors to demonstrate that they can provide Year 8 processing power today. Therefore, there is no dependence on future hardware development. (Page 2)

In general, the software requirements of the RFP do adequately reflect the kinds of needs of USDA. (Page 36)

#### CONSIDERATION OF ALTERNATIVES TO CURRENT RFP

Senator MCGEE. On page 22 of the report, GAO suggests that if the procurement is cancelled and if that action results in some operating problems requiring interim upgrading of computer capability, the Department could consider some alternatives specified in the Federal Management Report 74-5.

Has the Department given any thought to those alternatives? Obviously, the focus is on the consequences, what options you have, what flexibility you might have, how much rides on doing it only the one way.

Mr. BOLDUC. Yes, sir. I think any good manager never puts all of his eggs in the same basket. We have considered various alternatives. They must be considered because of our need to respond to an increasing workload. We are considering those alternatives. We are costing out those alternatives.

There are some difficulties in considering some of those alternatives. But we are considering them and will be in a position to discuss them with appropriate parties during the last week in June.

#### BENCHMARK TESTS

Senator MCGEE. What is meant by benchmark tests? What is involved in a procedure like that?

Mr. MEETZE. These are a series of software programs that are representative of the work being performed by a particular organization. They are grouped together to form one long stream of jobs and run on a computer to act as a baseline. If I take this benchmark or a series of programs and run it on computer A, and it takes 3.5 minutes to process, then that is my baseline, 3.5 minutes.

I can take that particular benchmark to computer B and run on it and it runs at say, 2 minutes or 4 minutes. Then I have some comparative measure of the processing power of each of the particular pieces of equipment.

Senator MCGEE. As I understand it, one of the principal elements of cost incurred both by the Government and industry in this matter was the preparation and the execution of the benchmark tests. When were those benchmark tests conducted?

Maybe a guess, and then you can refine it for the record as you doublecheck.

Mr. MEETZE. They started in late January and ended in March.

Senator MCGEE. Of this year?

Mr. MEETZE. Yes, sir.

#### DATE OF DEPARTMENT'S AWARENESS OF GAO RESERVATIONS

Senator MCGEE. When were you first made aware that GAO had some serious reservations about the procedures preceding the submission of the RFP to the industry at the end of February 1974?

Mr. BOLDUC. As I recall, the exact date—

Senator MCGEE. We are interested in approximations here, even though I am a historian.

Mr. BOLDUC. As I recall, sometime on or about July 1974, GAO came in and raised a series of questions in connection with FEDNET, the extent to which Agriculture participated with GSA, how that participation took place, et cetera. I don't really wish to get into areas of detail.

Subsequent to that initial inquiry, I suspect it was August, GAO returned. It was then August or September. GAO returned and asked me a few questions because I was—

Senator MCGEE. You are referring to August or September of 1974?

Mr. BOLDUC. I am sorry; yes, sir, 1974.

Senator MCGEE. I wanted that for the record.

Mr. BOLDUC. At that point in time, they returned and asked questions of me in my capacity as acting Director of the Office of Automated Data Systems in addition to being Deputy Assistant Secretary.

The questions were then departing somewhat from what I understood the purpose of the inquiry to be. They were asking questions about what we had done by way of studies to support the RFP.

On or about the second week of November, we learned that was in the process of putting together a rough draft of their report.

We met with GAO and first learned of their concern regarding the adequacy of our earlier studies—telecommunications plans—privacy impact, et cetera.

#### GAO INDICATION OF CANCELLATION RECOMMENDATION

Senator MCGEE. Did they mention they were recommending that the procurement be cancelled at that time?

Mr. BOLDUC. They were indicating at that point in time that they were proposing cancellation action but that their proposal would first be subject to clearance and approval with higher officials within GAO. They did not give us an official GAO position at that time.

I might go on to point out that we had discussions. We gave them data. We advised them we had an ongoing requirements study. We told them we would make them part and parcel to that study if they wished. We would make the results of the study available to them. It was not until the afternoon of, I believe, February 28, some 3½ months later, that we got word that they had a draft report for us to take a look at.

I believe they gave us a 10-day period to respond to the report, which was unlike their normal 30- to 60-day response time. Another 3 months went by and then we finally received a final copy of the report. I believe it was June 5 when we received the report. I was out of town at the time—though the report was released to the press before we received our copy.

Senator MCGEE. It was released on the 3d.

Mr. BOLDUC. We didn't get our copy until the 5th. It is true, that GAO had expressed their concerns to us. It is also true that they knew that vendor proposals were due to be submitted on November 29, 1974. As I understand the process, sir, the major por-

tion of the developmental costs incurred by the vendors were incurred prior to November 29. Thus, my position and the Department's position at that time, as it still has remained consistent throughout, was that we should not close off any options by cancelling now without first considering all of the alternatives from a feasibility, cost, and economic point of view. We never got GAO's official position until about the 5th of June.

Senator MCGEE. Was the GAO position in the first week in June a surprise?

Mr. BOLDUC. No, sir; surprised at the delay, yes, but not surprised at their conclusions because we had attempted to meet with them and establish a dialogue during the 10-month period we were under review.

#### USDA MEETINGS WITH GAO

Senator MCGEE. Did you have, indeed, dialogues with them?

Mr. BOLDUC. Yes, sir, we sure did.

Senator MCGEE. More than one in terms of a sit-down session, or several, or what?

Mr. BOLDUC. I believe we met with the individuals conducting the audit on two or three occasions during the audit. We met with the total staff that was responsible for the audit on another two occasions, I believe.

We furnished them with written communications. In some cases, we had to be quite insistent to meet with them in order to discuss the audit results.

Senator MCGEE. Did you initiate the request to meet with them?

Mr. BOLDUC. To meet with them, yes, sir.

Senator MCGEE. Were there any meetings requested by GAO?

Mr. BOLDUC. I would have to check the record on that, sir. When I heard they were in the process of preparing a report, and I had been one of the responsible officials interviewed, I took the initiative and called them and pretty much insisted and probably made a pain of myself, that we sit down and meet before they released any report. That was last November, before the vendors submitted their proposals.

#### TIME FACTORS REGARDING GAO STUDY AND CONTRACTORS

Senator MCGEE. To the best of your knowledge, when did representatives of the contractors learn just of the GAO's involvement in the whole matter? Do you have any sense of a time factor there?

Mr. BOLDUC. I came in as Acting Director of ADS in September, 1974. I would venture to say it was probably after September because I do recall requesting copies of the AMS reports to make available to GAO for their review.

Senator MCGEE. Would it be the same time they were first advised that GAO was thinking of recommending that procurement be cancelled?

Mr. BOLDUC. I did not know of that, sir, until November. That was when it was first called to my attention by GAO.

Senator MCGEE. Were the contractors privy to it by that time?

Mr. BOLDUC. GAO, I believe, had already met with the contractors. What they may have apprised them of, I really don't know. But

I might mention that GAO was very cautious about this. They continued to caution us that their proposed cancellation action was the audit team's recommendation and that it would have to be cleared by higher officials. We did not consider GAO's position as official until we received their final signed report. That is exactly the way we followed it.

Senator MCGEE. I suppose part of it would be how seriously you took it and how seriously they took it.

Mr. BOLDUC. I think you are absolutely right, Mr. Chairman. I might add that, if GAO was that serious about it, if they felt that their points of view had merit and were supportable and they wanted to place us in a position of having to cancel prior to November 29, I think an official position by GAO at that time would have been appropriate.

Senator MCGEE. At least it doesn't suggest they were precipitous in jumping into that.

What if any consideration was given in notifying the contractors in November 1974, prior to benchmark testing, that there was a possibility that this procurement might be cancelled upon the recommendations of GAO?

Mr. BOLDUC. Senator, there was no consideration given to notifying the contractors at that time because the individuals making the audit were only stating their own team perceptions and we would not ascribe any officiality to GAO's recommendation until it had been staffed at the decisionmaking level within the agency and had fully considered USDA's position. The first time this occurred was when we received the final report in June 1975.

#### CONFIDENTIALITY AND SECURITY

Senator MCGEE. One of the major concerns in the GAO report is the allegation that USDA did not adequately consider security requirements which might be necessary to protect personal and other sensitive information from unauthorized access. The report concludes that since USDA did not make the studies necessary to develop the security requirements it could not have an adequate basis for developing realistic security specifications for the RFP. What is your comment on that allegation?

Mr. MEETZE. USDA has always recognized the need for considerable security in dealing with personal and other sensitive information. In replying to a request from Senator Sam Ervin in 1970 and again updating a similar request from the former Senator in 1972, USDA provided information on all of the then existing files containing personal information requested by the Senate. Short of the highest security levels required for military data of a national security nature, the Department incorporated into the specifications for this procurement realistic cost effective security measures to protect personal and other sensitive information from unauthorized access.

USDA's position is that the protection of personal and other sensitive information is adequately covered from a technical standpoint in the RFP. Other measures to insure protection of personal and sensitive information include physical security of data storage, determination of the need to acquire and store the data and administrative

procedures to determine excessibility of the data—all of which fall outside the RFP—but when taken together represent a total approach to the protection of personal and sensitive information.

Senator MCGEE. The GAO report also suggests that in your agency-by-agency survey started in October 1974, the two questions which were asked in reference to privacy and security were wholly inadequate on which to base a program of security requirements. GAO suggests that you did not take advantage of and utilize the publication and information which was available to you in regard to the security and confidentiality provisions in preparing the ADP applications systems survey. Is this an accurate conclusion on the part of GAO or do you take exception to it?

Mr. MEETZE. GAO infers that the purpose of asking two questions in the workload survey was to acquire sufficient information on which to base program of security requirements. This is correct. The purpose of identifying data through the means of the questionnaire was merely that—to identify. Information collected on the forms was specifically designed to allow easy cross-check with USDA's data inventory. The program identification codes on the survey form correlate with the program identification codes on the data inventory. This would allow detailed personal followup and was intended to simplify updating the data inventory.

#### LACK OF ECONOMIC STUDIES

Senator MCGEE. Turning to chapter V of the GAO report, that contains the allegation that USDA did not make the economic studies required by Government regulations before it issued the RFP in February 1974. Consequently, USDA had no basis for evaluating the potential costs and benefits of the proposed procurement or the costs of alternative approaches for satisfying its ADP needs. In your opinion, did USDA follow the required requirements of Government regulations and were the necessary costs and economic studies as required by those regulations conducted by USDA?

Mr. MEETZE. Yes; in my opinion, USDA followed the required Government regulations and necessary cost and economic studies were conducted at various times by USDA. GAO might question whether these studies were adequate basis for the issuance of the RFP in February 1974.

#### RFP BUDGET COSTS

Senator MCGEE. In its letter of response to the GAO report, the General Services Administration suggests that the procurement not be cancelled at this time because of the large investment by industry and Government. Can you tell us at this time what Federal expenditures or obligations have been incurred in the preparation of this RFP and how much of that amount would be lost if the RFP were cancelled as suggested by GAO?

Mr. MEETZE. We estimate that a total of \$764,000 Federal expenditures or obligations have been incurred in the preparation of this RFP. A large majority of these costs would be lost if the RFP were cancelled.

Senator MCGEE. Do you have any estimate as to what cost might have been incurred by the contractors in their pursuit of this matter to date? How much would have been incurred after November 1, 1974?

Mr. MEETZE. Mr. Chairman, I cannot answer this question with any accuracy and suggest that it be referred to the contractors involved.

Senator MCGEE. If the RFP were cancelled as suggested by GAO, would the expenditures of the private contractors be lost entirely, or could some part of their efforts be transferred to a new RFP if one is to be issued by the Department or GSA?

Mr. MEETZE. Again, Mr. Chairman, I suggest that this question be referred to the contractors involved or the GSA.

Senator MCGEE. In your opinion, are these costs, either private industry costs or Federal costs or both, a justifiable reason to continue the procurement process if it is determined that the Department did not comply with either its own or governmental regulation prior to releasing the RFP to industry early in February 1974?

Mr. MEETZE. Yes; we believe these costs are justifiable reasons to continue the process, but not the only reason. It is my sincere belief that the Department did comply with its own and governmental regulations and what is at issue here is a conscientious and technical disagreement as to the degree of compliance or the detailed nature of certain studies as well as interpretation of these regulations rather than fundamental noncompliance with them.

#### LEGAL CONSIDERATIONS

Senator MCGEE. Has the Office of the General Counsel been consulted on this matter?

Mr. MEETZE. Yes, we have had some discussions with the USDA's Office of the General Counsel on this matter.

Senator MCGEE. Do you see any legal problems to your proceeding with the procurement policies along the lines you have suggested? In other words, the GAO report strongly suggests that you have not followed either your own departmental requirements or Government-wide requirements prior to initiating your procurement plans. I am wondering whether your failure to do so would leave you open to some type of law suit to enjoin or prevent you from proceeding with the procurement process.

Mr. MEETZE. There appears to be, in my judgement, no legal cause of action which could arise from the Request For Proposal (RFP). A material modification to the Request For Proposal could require the necessity for issuing a new RFP. Any cause for legal action by a vendor, if pursued, would apparently have to be raised on the facts.

Senator MCGEE. If the RFP were to be cancelled and the Department advised to go back and start over again on this procurement, how long would it take you to conduct the studies recommended by GAO and come up with a new RFP to be released to the industry?

Mr. MEETZE. Most of the studies recommended by GAO are already completed. The departmental plans have, for some time, been to undertake a year-long study of long range communication require-



ments, the results of which would be the combination of many of the communication networks we now have. If we are advised to go back and start over again on the procurement to complete this communications study, which we believe not to be a direct issue of this procurement, USDA would be delayed until the middle of 1977. At that point a new RFP could probably be released to industry with an approximate period of 3 years wait before the new equipment could become operational.

#### FORMS DUE AFTER AWARD

Senator MCGEE. The GAO continues and suggests that as a result of this conclusion by AMS, the Department proceeded to survey its various agencies with questionnaires and forms to be completed and returned to the central office on February 17, April 15, and September 15, 1975. In the meantime of course, the RFP is still pending and the contract award date was tentatively set for this month. In view of this, what is the explanation for having these forms returned to the agency by September 1975, several months after the contracts are scheduled to be awarded?

Mr. MEETZE. Forms representing major and minor applications either currently being run or planned on being run on USDA computer centers were due February 17 and April 15. Those due September 15, addressed only those other applications in being but not intended for processing on departmental centers. Additionally, these latter forms addressed conversion requirements and could not be filled out accurately until after contract award.

Senator MCGEE. In this regard, the GAO report says, and I quote:

It seems to us, therefore, the survey and analysis initiated in October 1974, can have only a limited impact upon the already established specifications of the current procurement action.

Do you agree with that opinion?

Mr. MEETZE. We agree that the results of the survey and subsequent analysis will not result in specific changes to this RFP. However, the analysis will allow us to determine if the specifications in the RFP are adequate. If they are not, then this would be reason to reconsider continuing the procurement process.

#### GAO COST ESTIMATES

Senator MCGEE. Do you agree with the cost estimates which are set forth on page 18 of the GAO report and which I understand are prepared on estimates prepared by AMS under its contract with USDA? Are those realistic estimates or in other words, are we actually discussing a proposal here which will cost over \$400 million over the next 8 years?

Mr. MEETZE. We do not agree with the cost estimates in the GAO report. The incremental costs, that is, those specifically incurred as a result of this procurement, would approach \$64 million on a discounted basis over 8 years, \$90 million in 1975 dollars. Again, GAO implies by their analysis that this is an entirely new project, not the modification of an on-going operation.

Senator MCGEE. Could this be done by existing departmental personnel or would it be necessary for you to contract with non-Federal agencies to accomplish this?

Mr. MEETZE. It would be necessary for us to contract with non-Federal agencies to accomplish this study.

Senator MCGEE. How much money was expended for the contracts you have had with AMS commencing in January 1974 to date?

Mr. BOLDOC. \$166,000, Mr. Chairman.

#### PRELIMINARY WORK DEFICIENCIES

Senator MCGEE. Quite frankly there is one matter that is quite difficult for the committee to understand. Mr. Wright became Assistant Secretary for Administration in March 1973. It is apparent that he soon recognized that the preliminary work that had been done in this area was deficient, for in November 1973 he released an RFP for a study which ultimately cumulated with the contract which was granted to American Management Systems in January 1974. Even with this knowledge on his part, however, he proceeded with the procurement by releasing the RFP to the industry in February 1974. Do you have an explanation or clarification of this which would be of some assistance to the committee in resolving this matter in its own mind?

Mr. BOLDOC. When Mr. Wright became Assistant Secretary for Administration in March 1973, he soon learned that many agencies were not totally in support of the approach taken by the Department in reducing the number of computers and computer centers managed and operated by the agencies themselves. This was certainly valid on the part of the agencies in questioning the loss of their own independent control of their computer hardware. In order to reassure himself that the approach taken by the Department in its efforts to economize the computer resources of the Department and wherever possible to improve upon this approach, Mr. Wright issued the request for the study contract. This contract eventually was awarded to American Management Systems in January 1974. However, it was awarded to verify that the approach taken by the Department in its overall plans for ADP in USDA were appropriate and wherever possible AMS was to make recommendations to strengthen and improve this approach. It was only in the context of this verification and strengthening of the departmental plans was AMS to review the procurement which was at this time being released to industry. At no time had Mr. Wright been made aware of deficiencies either in the plans of the Department or the work proceeding toward the release of this RFP. It was only several months after the release of the RFP that preliminary reports from AMS raised any concern about the equipment to be acquired. These concerns were qualified at various times on the part of AMS by a lack of sufficient data and the inadequacies of its own investigations. To sum up, Mr. Wright was interested in having AMS perform a study to strengthen the Departmental approach to its utilization of ADP resources and in no way to uncover any deficiencies which he suspected through other sources of information.

FARMERS HOME ADMINISTRATION PLAN TO ISSUE RFP FOR SYSTEMS  
STUDY

Senator MCGEE. Another development that raises some concern is a letter that we received here from the Farmers Home Administration late last week, June 13. This letter advises us that the Farmers Home Administration plans to issue a request for proposals to conduct detailed studies of the agency's information collecting and processing systems.

They will request a complete new design to take advantage of current practical computer systems technology. The agency hopes to follow this study up with another contract to private industry to complete the detailed design and implement the revised system.

This letter specifically points out that it is necessary for the agency to go to outside contracting on this and to obtain expertise from the private sector. It is further indicated that this effort can be completed by the beginning of fiscal 1978—2 years hence—at a cost of \$2 million to \$3 million.

Having recited the contents of that letter, is it proper to assume that Farmers Home Administration is one of the agencies within the Department that is a heavy user of ADP equipment?

PURPOSE OF FMHA STUDY

Mr. ELLIOTT. One, as you are aware, GAO has indicated several agencies do not have acceptable accounting systems. Mine is one. We have been endeavoring to get an accounting system as well as an information or data accrual system adequate to the management of Farmers Home Administration. We do not have the capability in terms of system designers to come up with what is really a requirement study phase I, which says here is what you should do there. This is the way it should be done.

Before we go any further, as you know, I advised the committees of our desire and intent in consultation with you to go out and develop the necessary systems design for the data processing as well as for the accounting. That is phase I.

At the end of phase I, the question then needs to be addressed to the committees of Congress as well as a request for appropriations, before, in fact, implementing a data management and an accounting system?

FMHA COMPUTER WORKLOAD

In both instances before implementation we will consult with the Congress. We are as you know, a major user of computer power. We have over a million active borrowers accounts. We are handling now about \$15 billion in active loans. We are a major user of computer power of the Department.

Senator MCGEE. Just to put it as part of your record there, what percentage of the total ADP work load would be attributed to FHA?

Mr. ELLIOTT. One-fifth, plus what is handled in the finance center for personnel payroll and other activities that are central to the Department. But my program activity in St. Louis, fully utilizes the computer power there.

CONTRACT FOR SOFTWARE ONLY

The point is, I am not asking in that letter for a contract that does any more than develop a software system and the programing necessary to create a sound accounting system acceptable to GAO and a Data Management Systems necessary to manage the affairs of FHA. The system must meet the needs of the Department for information about my management, and the Congress' need for information as well as the requirements for information of other agencies of the Government requirements of it.

We are now at capacity using an old software system. The proposed new system is required to give information to provide many agencies of Government with sensible accounting data and with a sensible data and management information.

That is all this contract addresses itself to. It does not address itself to the hardware. It would, in effect, use hardware operated by the Department.

Senator MCGEE. Did you want to offer any refinements, Mr. Bolduc, about the percentage of the load?

Mr. BOLDUC. Yes, sir. The only thing I would add is that Frank is using only one unit. He is taking our four major computer centers and adding the St. Louis center to it and then taking one over five, which is 20 percent. I would rather take a look at the total departmental workload and not only the numbers of centers and then make an assessment.

Senator MCGEE. Fine.

Mr. ELLIOTT. Agreed. We use the computer capacity at St. Louis, whether it is in terms of core capacity or processing capacity.

FMHA PROPOSAL AS EVIDENCE SUPPORTING GAO CRITICISMS

Senator MCGEE. The reading of this latest FmHA letter seems to lend some significant credence to the GAO report that the necessary and proper agencies' needs and determinations have not been made prior to the release of the RFP. It would tend to throw some doubt on the present position of the Department that those studies have now been completed and are subject to final determination at this stage.

Mr. BOLDUC. That is absolutely not the case. Let me turn it over to Hank and Frank who will explain how this effort has been fully coordinated.

Mr. ELLIOTT. All we are doing is redesigning a software system. It is not necessarily in terms of computer capacity. The present system we operate for our reporting and loan control at St. Louis, is archaic. This does not say we are adding more computer load. We are simply trying to get a better software program more responsive to the needs for accounting and to the needs of management.

The fact of the matter is, I would be hopeful if systems redesign would make better use of our present capacity.

Mr. MEETZE. Sir, as Mr. Elliott indicated, this is a systems redesign. They have a system now that is handling their loans being processed right now. In parallel with this, they will be developing a new system that will take the place of the current one. When it is completed, the current one will be dropped. As far as our workload is concerned,

it is based on the amount of loans expressed in terms of jobs that will be handled by the new system. FmHA systems planning was done in conjunction with a variety of staff offices within the Department and was fully coordinated with the workload analysis in our current requirement studies.

Senator MCGEE. Mr. Bolduc?

Mr. BOLDUC. I would say that they have handled that quite adequately.

Senator MCGEE. I think that is all we will have right now.

SERIOUSNESS OF CANCELLING RFP AT PRESENT TIME

Mr. BOLDUC. Mr. Chairman, in closing I would like to emphasize again the need to this committee and to the House subcommittee as well, to consider the very serious nature of closing any options at this point in time.

Senator MCGEE. We got that point very sharply here this morning. We will consider it. In all fairness to you, we will consider it from several points of view.

Mr. BOLDUC. I think it needs to be considered in light of the fact we did not talk here this morning about specific data and justification. We have accumulated much. We in the Department, for example, have increased our data processing workload at the rate of 50 percent per year during the last 2 years. Prior to that time, our processing workload has gone up at the rate of about 30 percent per year. When you have that kind of continuing increase in workload something has to be done with what is out there in the way of equipment and related capacity. How that is done, I believe, we should let the facts speak for themselves.

Senator MCGEE. I want to make it totally clear that the role of the committee in this matter is not in any way to become a millstone around the necks of progress or of the professional expertise that is obviously in command. You do a great deal that makes a difference in the way we are able to move and stay on top of very complex things, in these rapidly changing times.

You have to be a little patient. We just want to make sure that we aren't guilty of neglect, or laziness or something else. Things have a way of developing, even in these very sophisticated times, in the wrong direction. The third anniversary of one of those events was yesterday.

Having been burned, all of us, in that way, we are more conscious than ever to try to somehow educate ourselves so that we can stay on top.

Mr. BOLDUC. I understand and appreciate that. I think the significance of this decision is of such magnitude that you must and should become involved.

Senator MCGEE. We will be involved in which way that decision goes. We will not be involved in announcing that decision this morning because we have many things to hear.

Mr. BOLDUC. Yes, sir. Thank you.

SUBMISSION OF ADDITIONAL COMMENTS FOR THE RECORD

Senator MCGEE. Thank you very much. If any group or individual would like to submit anything for the record, pertaining to this matter, the record will be kept open. It won't be kept open indefinitely. It will be left open for a few days to give you a chance to prepare relevant responses to this. There will be no base for the committee to arrive at a position until such material is here and we have had a chance to correlate it with the hearing testimony and the report from GAO.

Just don't bring down all of your board of directors, minutes and all of the commercials you put out for the tourists. We want to know what is relevant here.

[The statements follow:]

STATEMENT OF JAMES R. POMPA

Mr. Chairman, I am James R. Pompa, Honeywell Information Systems' Vice President responsible for the Federal Systems Operations. My organization represents the company in its business interests with the Federal Government.

I am accompanied this morning by Mr. M.J. Keliher, Director of Civilian Agencies' activities within my organization.

Honeywell has been a significant supplier of data processing equipment and services to the Federal Government since 1958 and has installed, in various Government departments and agencies, computer systems valued in excess of \$500 million. Government business is therefore very important to us.

I should like to begin this statement by expressing our Company's appreciation to the Committee for affording us this opportunity to express our views with respect to the procurement of computer systems for the U.S. Department of Agriculture in general and the pending computer procurement which is the subject of this inquiry in particular.

The request for proposals to supply computer systems to the Agriculture Department was issued on February 28, 1974. Since that time, Honeywell has spent over \$2,000,000 on this project. Our interest in this procurement is, therefore, both immediate and apparent. It should be emphasized that this money has been spent not only by Honeywell, but in similar amounts by other companies in our industry in a vigorous competition which we have been led to believe would result in the award of a contract to implement what was held out to us--and

which, upon independent inquiry, we still believe to be a valid and urgent operational need of the Agriculture Department.

Together with the significant investment of industry in this procurement, an equal or larger investment has been made by the Government itself. This investment consists not only of money but of time. It is not our intention here this morning to represent either the views of the Agriculture Department or of other agencies of the executive branch of the Government; but rather, to point out what, from our vantage point, appears to be important considerations weighing against an abrupt cancellation of this procurement. Such a cancellation at this time would be premature in our view and would carry with it an irrevocable loss of significant public and private investment. We suggest to the Committee, therefore, that this procurement not be cancelled but that it be suspended, and that a further analysis be undertaken as to its merits prior to a final decision. We do believe that the criticisms offered by the General Accounting Office in its report of June 3, 1975 raise matters of serious concern.

On the other hand, there is little doubt that there does exist a requirement not only for increased computer capacity in the Agriculture Department, but for more efficient utilization of all its data processing resources. Indeed, except for IBM Series 370 computer systems installed on an interim sole source basis to meet immediate needs, the equipment complement of the Agriculture Department is aging or obsolete.

We agree with the General Accounting Office that a complete and integrated plan for satisfying the needs of the Agriculture



Department should be prepared and approved prior to embarking on a contract with any vendor. We feel, however, that within the framework of this present procurement there is sufficient flexibility to enable it to serve as a vehicle to meet Agriculture's needs, once appropriate planning has been completed. If, however, the present procurement is cancelled, it is entirely possible that the tedious and expensive process of preparing specifications, advertising for participation, preparing proposals, and conducting live test demonstrations will simply be repeated with little appreciable difference in the final outcome.

If inquiry indicates that the present procurement does not properly reflect the actual needs of the Department of Agriculture, it appears to us that corrective measures can be taken prior to contract award which would not only put to rest the issues raised by the General Accounting Office, but would preserve to the greatest extent possible the mutual investment already made.

We are frankly concerned that cancellation of this procurement at this time--together with what we believe are urgent needs for at least some increased computer capacity--will force emergency action resulting in expensive and uncoordinated sole source procurement action.

With respect to the issue of security and privacy raised in the GAO report, we should like to point out that newer and more modern computers, installed and operating in a manner which is carefully planned in advance, afford a greater degree of protection of stored information than that provided by

systems in use today. We feel, therefore, that there is still time to address these issues and remove them as a source of concern.

There is another matter which should be raised, and that is the integrity of the competitive procurement process itself. Industry increasingly finds itself--in trying to serve the Government-- in a position where it is difficult to determine whether investment in procurements such as this is justified. To terminate this procurement without the most careful and searching inquiry is likely to deter industry from participation in future competitive procurements and could possibly result in the re-emergence of costly and inefficient non-competitive procurement from a single source.

Also, because competitors participating in the current procurement have not yet submitted final price quotations, it is impossible to project accurately the costs of the total program. But data compiled by the General Services Administration should substantiate the large savings which accrue to the Government through competitive procurement of Automated Data Processing Systems when compared to sole source procurements.

In summary, we have reviewed in detail the General Accounting Office's Report to Congress and concur with their recommendation that the Department of Agriculture should have a consolidated and integrated plan for the implementation of the required system. We further agree that they should justify their plan to comply with the Privacy Legislation of 1974. However, we do not agree with their recommendation to cancel the planned procurement.

Honeywell respectfully requests therefore:

- 1) that the Congress direct GSA to hold in abeyance any award based on the present procurement, as opposed to cancellation of the procurement;
- 2) that justification be re-examined and any modifications to equipment configurations, number of service center sites, locations of service centers, implementation schedules be conveyed to participating vendors;
- 3) that issues of security and privacy be addressed and acted upon in the manner required by law;
- 4) that participating vendors then submit price offerings commensurate with these revisions;
- 5) that contract award then be made based on a fully justified and documented need.

Thank you, Mr. Chairman and members of the Committee. I will be glad to answer any questions you may have at this time.

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LETTER FROM D. E. STROMBACK

June 30, 1975

Dear Mr. McGee:

Burroughs Corporation has participated in the present competition for award of a contract by the Department of Agriculture for the installation of automatic data processing equipment at major Departmental computer centers. We are writing to you because we are greatly concerned that this procurement may be cancelled.

There are definite advantages to the Government in a consolidated acquisition of compatible computer systems, such as the Department of Agriculture is undertaking in this case. These advantages include: (1) compatibility of software programs, (2) flexibility of workload assignments among systems and (3) effective control of information in respect to privacy and confidentiality. Such benefits could be lost if this procurement is not carried out.

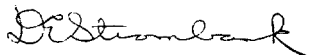
In addition, the Government would lose substantial cost savings attainable under the present strong price competition. If the present competitive procurement is aborted, the Department of Agriculture will be forced to continue a piecemeal acquisition of equipment under non-competitive conditions to meet its growing workload. The result then would be that a large amount of equipment will be procured incrementally, and the cost to the Government, lacking the safeguard of vigorous price competition, will have been greatly increased. It is common knowledge that recent competitive computer procurements by the Government have brought significant savings of as much as 50% from published list prices.

We recognize of course that the Subcommittee must be satisfied as to the adequacy of the justification for this procurement and trust that the Department of Agriculture will provide the same so that the procurement can proceed as planned. If, however, it is the Subcommittee's decision that further justification is needed, we recommend that the Subcommittee defer the procurement to permit this to happen.

Burroughs and the other bidders, have expended substantial sums on this procurement. To compete for contracts of this scope requires the dedication of technical personnel over long periods of time and the utilization of very costly computer installations by all bidders to run comprehensive live test demonstrations of proposed systems. If the Department of Agriculture procurement is cancelled, computer companies will become discouraged and may be unwilling to bid for future Department of Agriculture contracts.

We would like to meet with you in Washington at the earliest opportunity to discuss this matter. Our Washington representatives will be in contact with your office regarding an appointment.

Sincerely yours,



D. E. Stromback  
Vice President and Group Executive  
Federal and Special Systems Group

LETTER FROM C. A. CHRISTOPHER

**UNIVAC** DIVISION  
2121 WISCONSIN AVE., N. W., WASH., D. C. 20007 . TEL. (202) 338-8500

June 25, 1975

The Honorable Gale W. McGee  
United States Senate  
Washington, D.C. 20510

Dear Senator McGee:

Re: June 19, 1975, Appropriation Sub-Committee Meeting  
on USDA - ADP Procurement

Representatives of the Sperry Univac Division of Sperry Rand Corporation attended the Sub-Committee meeting referenced above. Your closing comments included an invitation to interested parties to submit a statement to be included for the record on the subject matters discussed during the meeting. This letter is in response to that invitation.

The Federal Systems Operation of the Sperry Univac Division is one of the three (3) vendors who have participated in the competitive procurement to provide Automatic Data Processing systems to the United States Department of Agriculture (USDA). Our participation began in the early part of 1971 in preparation for the USDA procurement effort. Since that time our involvement has continued and has involved a substantial commitment of personnel and expenditures to respond to the Request for Proposal and to successfully perform the benchmark programs. These benchmark programs were representative of the projected eight (8) year data processing requirements of the Department of Agriculture.

Since the release of the Request for Proposal in February, 1974, we have expended between one and two million dollars in the competitive process.

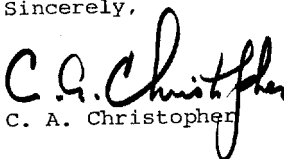
To protect that investment and allow us to continue in the competitive process we have undertaken, we request that the United States Department of Agriculture be allowed to continue their planned procurement to acquire Automatic Data Processing systems as specified in the February, 1974, Request for Proposal.

The continuation of the procurement effort will also ensure the Department of Agriculture will have the increased ADP capability on a phased delivery schedule that was determined necessary to meet the projected growth of the data processing workload.

Should the procurement be cancelled, Sperry Univac would face a non-recoverable loss of the expenditures incurred. Furthermore, with a new procurement recycling time of at least three (3) years, the United States Department of Agriculture would probably sole source the equipment to the vendor who is the predominant supplier, probably at list price, to fulfill its data processing requirements during this three (3) year interim period. A sole source procurement provides the least economical option and/or alternative for any Government department or agency acquiring automatic data processing equipment. It would be clearly unfair to permit vendors who do not choose to be involved in the competitive process to benefit from such a cancellation by a sole source award.

Therefore, it is with extreme concern and anticipation that we look to your committee's approval to continue the competitive process. I would be happy to meet with you or members of your committee personally to discuss this viewpoint.

Sincerely,

  
C. A. Christopher

CONCLUSION OF HEARING

Senator MCGEE. This concludes the hearing on computer problems. The subcommittee will stand in recess subject to the call of the Chair.

[Whereupon, at 12:25 p.m., Wednesday, June 18, the hearings were concluded and the subcommittee was recessed, to reconvene at the call of the Chair.]

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	<b>ACTION</b>	<b>DIRECT REPLY</b>	<b>PREPARE REPLY</b>
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<b>Remarks:</b>			
<p>There was considerable discussion about ADP pronouncement and GSA and USDA problems w/ ADP pronouncement. The attached provides some background info -</p>			
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