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United States General Accounting Office  
Washington, DC 20548

Accounting and Information  
Management Division

B-285092

May 8, 2000

The Honorable David J. Barram  
Administrator, General Services Administration

Subject: FTS2001: Improving the Revenue Estimation Process

Dear Mr. Barram:

At the request of the House Committee on Government Reform, we recently completed a review of the General Services Administration's (GSA) revenue estimation process for its FTS2001 long-distance telecommunications services program.<sup>1</sup> During the course of this work, we identified several weaknesses in GSA's process for estimating program revenues. These weaknesses did not affect the integrity of GSA's February 2000 revenue estimate but could inhibit the accuracy, reliability, and consistency of future estimates if they are not corrected. The purpose of this letter is to summarize the nature of these weaknesses and recommend steps to eliminate them.

### Background

As you know, the federal government is in the process of transitioning from GSA's mandatory FTS2000 long-distance program to its nonmandatory FTS2001 program to obtain services including long-distance, toll-free, and 900 voice services; international services; internet-and intranet-based services; and low-speed and high-speed data communications services. GSA awarded two contracts for the program—one to Sprint in December 1998 and one to MCI WorldCom in January 1999. Each contract is for 4 base years from the date of award with four 1-year options, and each contractor is guaranteed minimum revenues of \$750 million over the life of the contract.

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<sup>1</sup>Telecommunications: *GSA's Estimates of FTS2001 Revenues Are Reasonable* (GAO/AIMD-00-123, April 14, 2000).

**This version includes page 6, which was missing from the original distribution.**

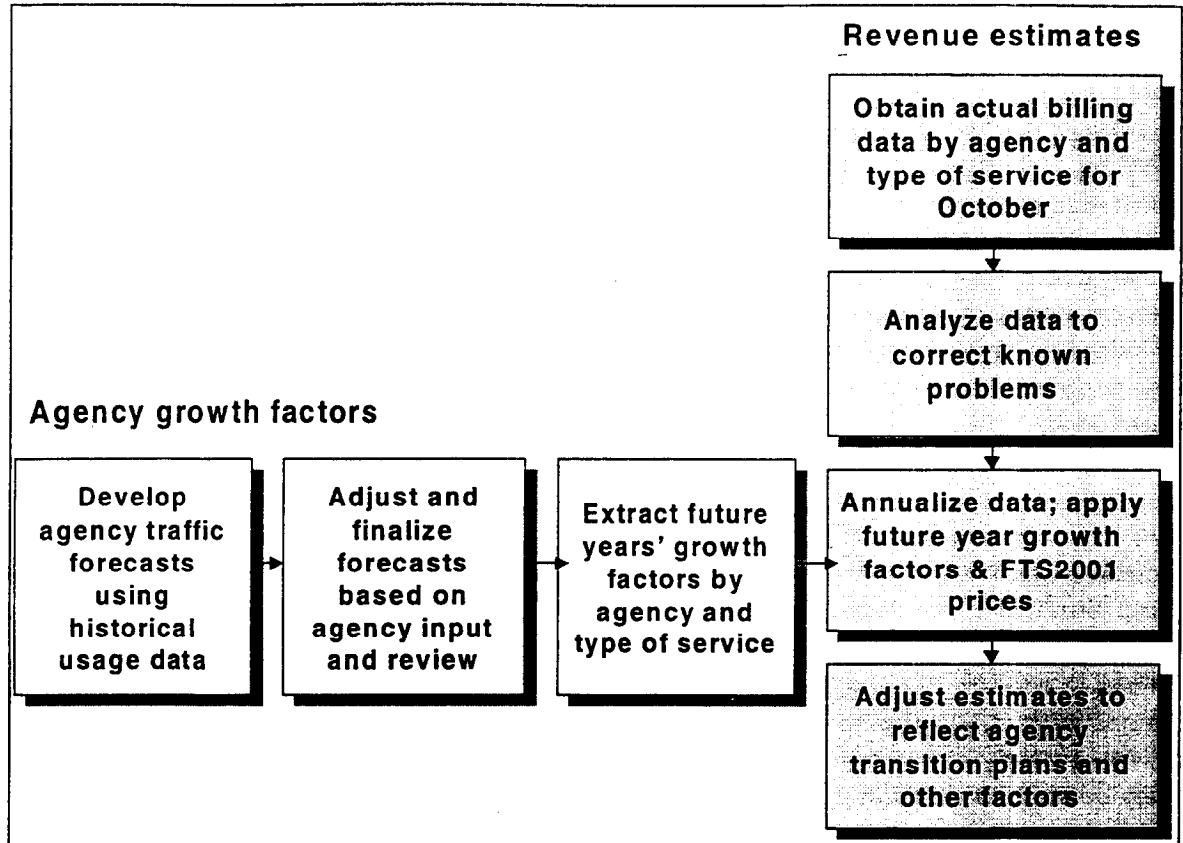
The FTS2001 program also conditionally provides for further competition beyond the two contracts already awarded. For example, service providers who are awarded contracts under GSA's Metropolitan Area Acquisition (MAA) program—which provides local telecommunications services in selected geographic areas—may be permitted to compete for the FTS2001 business (1) if allowed by law and regulation, (2) after the FTS2001 contracts have been awarded for a year, and (3) if GSA determines that it is in the government's best interests to allow such additional competition.

On January 5, 2000, the House Committee on Government Reform asked us to review GSA's FTS2001 revenue estimates. At our request, GSA and its Mitretek Systems support staff prepared an estimate of FTS2001 program revenue and an analysis of the estimated time frame for satisfying contract minimum revenue guarantees. Those estimates and analyses were prepared in January 2000 and subsequently revised in February 2000 to correct errors disclosed by GSA during the course of our review.

### **GSA's Revenue Estimation Process**

As depicted in the following figure, GSA based its revenue estimates on data reflecting past use of telecommunications services, adjusted upward to reflect historic patterns of service growth over time. Specifically, using October as a representative month, actual traffic data were drawn from billing tapes and reduced to a set of aggregate, location-based information that could be priced using FTS2001 contract prices. Concurrently, historic usage trends were coupled with agency-prepared requirement forecasts to develop growth factors reflecting year-over-year growth in demand for telecommunications services. The traffic set developed previously was annualized to represent 1 year of traffic. Pricing calculations were made against that annualized traffic set, and growth factors were applied to the aggregate estimate to reflect growth in revenue over time. Finally, adjustments were made to reflect agency transition plans and other factors affecting program revenue projections, as appropriate.

Figure 1: Process Used by GSA to Estimate FTS2001 Program Revenues



### GSA's Revenue Estimation Process Could Be Strengthened

We found that GSA's process produced a reasonable estimate of program revenues. However, we also found weaknesses in the GSA process that, although not significantly affecting the estimate developed, could undermine the consistency and accuracy of future estimates.

In particular, GSA did not fully use current traffic and forecasting data. For example, GSA did not use actual October 1998 traffic data in its analysis, but rather October 1995 traffic data adjusted to reflect 1998 actual traffic. Similarly, GSA used growth factors developed in 1996 to reflect future increases in most traffic volumes rather than more current growth factors developed in 1999.<sup>2</sup> GSA officials told us that it is a time-consuming and complex process to analyze traffic data and develop a representative traffic set that can be used in the estimation process. In view of time constraints, they used older data because those data had already been analyzed to support GSA's acquisition process and were therefore available in the required format. As we stated in our report, we contracted with Technology Futures, Inc.,

<sup>2</sup>Updated agency growth factors developed during 1999 were used for dedicated transmission and frame relay services.

experts in telecommunications forecasting, to prepare for us an independent high-level estimate of potential FTS2001 program revenues that was based on the most current traffic and forecasting data available.<sup>3</sup> That revenue estimate was essentially the same as GSA's revenue estimate. However, although GSA's use of older traffic data did not materially affect its recent estimates, the use of current traffic and forecasting data in future estimates would improve confidence in those estimates.

In addition, although Mitretek Systems took steps to ensure the quality of traffic information used as the basis for revenue estimates, it did not have adequate quality control procedures in place to ensure the quality and accuracy of the revenue estimation process itself. For example, after we began reviewing its process, GSA identified errors and omissions totaling hundreds of millions of dollars. Specifically, \$260 million in additional billable features and fixed costs—reflecting such things as one-time system customization charges and expedited service—were omitted from GSA's initial revenue estimates. Also, \$50 million of GSA's own overhead costs were erroneously included as revenue.

Lastly, GSA did not consistently document the reasons for changes it made to the FTS2001 forecasts submitted by agencies. According to Mitretek Systems staff, such changes were made either following consultation with the agencies or after review of more recently available traffic usage data. For example, GSA forecast figures for total switched voice service were more than 24 million minutes higher than estimates submitted by the Department of Defense for fiscal year 1999, but were more than 20 million minutes lower for fiscal year 2003. However, because the rationale for such changes was not always documented, it was difficult to account for differences between traffic projections obtained from agencies and those shown in the final forecasts.

### **Conclusions**

GSA's revenue projections are one of the key indicators for deciding whether additional FTS2001 competition would be in the best interests of the government, determining the timing for such competition, as well as keeping the Congress informed on the status of the program. While GSA's February 2000 revenue estimate was reasonable, the use of dated information and the lack of complete documentation and adequate quality review during the estimation process could undermine the accuracy, consistency, and reliability of future revenue estimates.

### **Recommendations**

We recommend that the Administrator, General Services Administration, formalize and strengthen the revenue estimating process to improve consistency and reduce errors by (1) using the most current traffic and forecast data in future revenue

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<sup>3</sup>*Telecommunications: GSA's Estimates of FTS2001 Revenues Are Reasonable* (GAO/AIMD-00-123, April 14, 2000).

estimates, (2) establishing quality control procedures to ensure the accuracy of revenue estimate derivations, and (3) clearly documenting the reasons for changes in forecast data.

**Agency Comments**

On April 19, 2000, we met with the GSA FTS Assistant Commissioner for Service Development to obtain agency comments on a draft of this report. He agreed with the information presented and suggested two minor clarifications which we have incorporated as appropriate. He also noted that GSA had been developing more current traffic data, but that effort was not complete in time for use in its recent revenue estimate. He told us that effort has since been completed, and that more current traffic data are now available.

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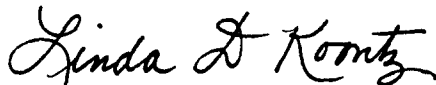
During the course of our work, we reviewed program documentation, initial program revenue projections, and copies of the contracts for FTS2001 services that were awarded to Sprint and MCI WorldCom. We interviewed GSA FTS2001 program managers and their supporting Mitretek Systems support staff and analyzed and documented the specific steps followed and assumptions used by Mitretek Systems to develop its revenue estimates. In addition, we engaged forecasting and telecommunications experts from Technology Futures, Inc. (TFI), Austin, Texas, to assist us in analyzing and evaluating the GSA revenue estimation process. We conducted our review from January 12, 2000, through February 28, 2000, in accordance with generally accepted government auditing standards. We requested and received oral comments on a draft of this report from GSA. We received comments from the FTS Assistant Commissioner for Service Development on April 19, 2000.

We are sending copies of this letter today to Senator Fred Thompson, Chairman, and Senator Joseph I. Lieberman, Ranking Minority Member, Senate Committee on Governmental Affairs, and to Representative Dan Burton, Chairman, and Representative Henry Waxman, Ranking Minority Member, House Committee on Government Reform. We are also sending a copy to the Honorable Jacob J. Lew, Director, Office of Management and Budget. Copies will also be made available to others upon request.

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If you have any questions regarding this report, please contact me or Kevin Conway, Assistant Director, at (202) 512-6240 or by e-mail at [koontzl.aimd@gao.gov](mailto:koontzl.aimd@gao.gov) or [conwayk.aimd@gao.gov](mailto:conwayk.aimd@gao.gov). Other major contributors to this report were Cristina Chaplain and William B. Ritt.

Sincerely yours,

A handwritten signature in black ink that reads "Linda D. Koontz". The signature is written in a cursive style with a large initial "L".

Linda D. Koontz  
Associate Director, Governmentwide and Defense  
Information Systems

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