United States General Accounting Office

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Report to the Chairman, Committee on Government Reform, House of Representatives

April 2000

TELECOMMUNICATIONS

GSA's Estimates of FTS2001 Revenues Are Reasonable

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United States General Accounting Office
Washington, D.C. 20548

Accounting and Information
Management Division

B-284758

April 14, 2000

The Honorable Dan Burton
Chairman
Committee on Government Reform
House of Representatives

Dear Mr. Chairman:

The General Services Administration's (GSA) Federal Technology Service (FTS) provides its customers with a broad range of end-to-end telecommunications services, including global voice, data, and video services, supporting both local and long-distance government telecommunications users. Its FTS2000 long-distance services reached more than 1.7 million users through two multibillion dollar 10-year contracts that were awarded to AT&T and Sprint in December 1988. Two contracts have since been awarded for the successor FTS2001 program– one to Sprint in December 1998 and one to MCI WorldCom in January 1999. The federal government is now in the process of transitioning from the FTS2000 to the FTS2001 long-distance telecommunications program.

On March 1, 2000, we briefed your office on the results of our review of the GSA's revenue estimation process for FTS2001 and provided answers to four questions you asked regarding the FTS2001 contracts' minimum revenue guarantees (MRGs) and the implications of allowing other service providers to compete in the FTS2001 market.

To answer these questions, we analyzed the process and assumptions GSA used to develop program revenue estimates and time frames for meeting the MRGs. We also contracted with Technology Futures, Inc.–experts in telecommunications forecasting—to assist in our review of the revenue estimation process and to develop an independent high-level estimate of potential FTS2001 program revenues. We conducted our review from January 2000 through March 2000 in accordance with generally accepted government auditing standards, and on March 22, 2000, we received comments on this report from the GSA FTS Assistant Commissioner for Service Development, the Assistant Commissioner for Service Delivery, and the Deputy Assistant Commissioner for Acquisition. Additional details on our objective, scope, and methodology are contained in appendix I. This report provides a summary of our briefing. Our detailed briefing slides are presented in appendix II.

The FTS2001 Program

GSA awarded two contracts for the FTS 2001 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 contracts. Major federal agencies committed themselves to transition their requirements expeditiously from FTS2000 contracts to FTS2001 upon award of those contracts and to use the FTS2001 contracts to meet their core requirements. However, unlike the FTS2000 program, agencies are not required to use FTS2001 for their telecommunications requirements. Agencies that opt to use the program will have access to a wide range of 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.

The FTS2001 program also provides for further competition beyond the two contractors already selected. 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.

Results in Brief

We found that GSA's revenue estimation process, which relies on historical and known agency requirements for FTS2001-offered services, produced a reasonable estimate of program revenues. Our independent, high-level estimate, which used the most currently available traffic forecasts and pricing information, produced essentially the same estimate–about $2.3 billion in revenue over the life of the FTS2001 program, assuming all 4 of the contracts' option years are exercised. During our review, we also identified a number of technical issues with regard to GSA's revenue estimation process that did not affect the integrity of its revenue estimates. We have included these issues in our presentation enclosed in appendix II to this report, and we will discuss these issues, along with our specific recommendations, in a separate letter to the Administrator of the General

Services Administration. The following summarizes the answers to each of the specific questions you asked.

Question 1: What percentage are the MRGs of the FTS2001 contracts?

Answer: The MRGs–a total of $1.5 billion–represent about two-thirds of current estimated program revenues over 8 years.

Question 2: When are the MRGs likely to be satisfied?

Answer: According to the results of both GSA's analysis and our own independent analysis based on current requirements forecasts, the FTS2001 MRGs are expected to be satisfied for both contractors during fiscal year 2004 (contract year 6).

Question 3: What sensitivities are there in each of the estimates provided in (1) and (2)? What factors could significantly alter these estimates?

Three primary factors could significantly alter estimates of total program revenue and corresponding time frames for satisfying the MRGs: pricing, agency demand for FTS2001 services, and transition progress.

- Price reductions, resulting from additional competition under the MAA program or the price management mechanisms in the FTS2001 contracts,[1] would decrease estimated revenues to the two FTS2001 service providers and increase the time needed to satisfy the MRGs.
- Agency demand for FTS2001 services could also alter estimates. For example, we noted that GSA's projections for growth in agency data communications services were lower than private sector trends. To test the sensitivity of this assumption, we developed a sensitivity analysis using a data communications growth rate more consistent with private sector trends, as described in appendix I. The results of this sensitivity analysis demonstrated that using a more aggressive data communications growth rate significantly increased total estimated revenues. As this additional growth would primarily occur in the outyears of the program, however, the estimated MRG time frame is unaffected.

[1]The FTS2001 contracts include a requirement for periodic price management efforts to ensure that FTS2001 prices are competitive with prices paid by other large users of telecommunications services.

- Delays in the current transition schedule could also decrease estimated revenues and lengthen the time needed to satisfy the MRGs. GSA originally expected the FTS2001 transition to be complete as of June 2000, but progress has been slow to date. As of February 17, 2000, GSA managers reported that only 26 percent of agency site transitions were completed and the remainder would be completed from now through December 2000.

Question 4: If additional competitors were permitted to compete for the FTS2001 business, how might that competition affect the estimates provided? Would reduced prices/transition costs brought about by such competition offset the impact on estimates?

Answer: Additional competition could yield price reductions, cause further transition delays, and reduce demand for services from the two existing FTS2001 contractors. In turn, these factors would decrease program revenues and lengthen the time needed to satisfy the MRGs. In regard to the potential benefits of reduced prices and transition costs, it is difficult to quantify the effect on estimates without knowing an added competitor's prices or the specifics of related transition costs. However, two factors would have to be considered in such an analysis. First, savings in transition costs would occur only if the new competitor was an incumbent FTS2000 provider and only to the extent that transition costs have not yet been incurred. Second, reductions in revenues to current FTS2001 contractors would increase the time frame for satisfying the MRGs. If MRGs are not satisfied during the contracts' term, GSA may be liable for additional payments to the contractors.

Agency Comments

On March 22, 2000, we met with the GSA FTS Assistant Commissioner for Service Development, the Assistant Commissioner for Service Delivery, and the Deputy Assistant Commissioner for Acquisition to obtain oral comments on a draft of this report. They agreed with the information presented and with our answers to your questions. They also suggested a few technical changes that we have incorporated as appropriate.

We are sending copies of this report to Representative Henry Waxman, Ranking Minority Member, House Committee on Government Reform. We are also sending copies to the Honorable Jacob J. Lew, Director of the Office of Management and Budget, and David J. Barram, Administrator of the General Services Administration. Copies will be made available to others upon request.

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* or *conwayk.aimd@gao.gov*. Other major contributors to this work were Cristina Chaplain and William B. Ritt.

Sincerely yours,

Linda D Koontz

Linda D. Koontz
Associate Director
Governmentwide and Defense Information Systems

Objective, Scope, and Methodology

The objective of our review was to evaluate GSA's revenue estimation process and answer the following questions:

1. What percentage are the MRGs of the FTS2001 contracts?

2. When are the MRGs likely to be satisfied?

3. What sensitivities are there in each of the estimates provided in (1) and (2)? What factors could significantly alter these estimates?

4. If additional competitors were permitted to compete for the FTS2001 business, how might that competition affect the estimates provided? Would reduced prices/transition costs brought about by such competition offset the impact on estimates provided?

To understand the FTS2001 program's services and its contract MRGs, we reviewed program documentation, initial program revenue projections, and copies of the contracts for FTS2001 services that were awarded to Sprint and MCI WorldCom. In examining GSA's options to add FTS2001 service providers, we also reviewed the solicitations that GSA has issued as part of its MAA program. We also interviewed GSA FTS2001 program managers and obtained other summary information on FTS2001 program implementation issues and status at the February 22, 2000, transition managers meeting in Washington, D.C., cosponsored by GSA, the Interagency Management Council, and the FTS2001 contractors.

To fully understand and evaluate the process used by GSA to estimate program revenues and time frames for satisfying revenue guarantees, we interviewed GSA FTS2001 program managers and their Mitretek Systems support staff and analyzed and documented the specific steps followed and assumptions used by Mitretek Systems to develop those analyses. In addition, we engaged forecasting and telecommunications experts from Technology Futures, Inc. (TFI), in Austin, Texas, to assist us in analyzing and evaluating the GSA revenue estimation process. To determine what factors could significantly influence those estimates, we also examined the influence of changes in pricing, expected service volumes, and program schedules.

To evaluate the reliability of GSA's program revenue estimates, we asked TFI to develop an independent estimate of potential FTS2001 program revenues, based on stated agency FTS2001 requirements and on pricing information covering the remainder of the contracts. In examining the level of growth forecast for agency demand, TFI staff observed that the outyear growth in agency data communications forecasts lagged behind commercial forecasts for the same time periods. Therefore, to evaluate the sensitivity of this factor, TFI also developed an estimate of program revenues that assumed a level of agency requirements growth more consistent with private sector trends and that at least half of this additional growth might be satisfied by the nonmandatory FTS2001 contracts.

To evaluate the forecasting methods used by agencies to estimate their FTS2001 service requirements, TFI staff joined us in conducting expert interviews at selected federal agencies. The four agencies we visited–the Departments of Defense, the Treasury, Justice, and Energy–represent a broad and sizeable range of telecommunications requirements and collectively accounted for about 46 percent of revenues billed for FTS2000 telecommunications services in fiscal year 1999. We interviewed telecommunications managers at each of the four agencies to determine how they developed their respective agencywide forecasts, including the steps they followed and the systems and technology factors they considered.

We conducted our review from January 2000 through February 2000 in accordance with generally accepted government auditing standards.

Briefing to the House Committee on Government Reform

Accounting and Information Management Division

FTS 2001: Analysis of Minimum Revenue Guarantees

Presented to

House Committee on Government Reform

March 1, 2000

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Agenda

- Background
- Objective, Scope, and Methodology
- GSA Revenue Estimation Process
- Minimum Revenue Guarantees (MRGs) Relative to Total Revenues
- Timeframe for Satisfying Minimum Revenue Guarantees
- Key Factors and Sensitivities
- Potential Effects of Additional Competition
- Potential Areas for GSA Improvement

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Background

- FTS2001, the successor to FTS2000, is a non-mandatory program intended to provide a range of telecommunications service to federal agencies including:
  - Long-distance, toll-free, and 900 voice services
  - Internet and intranet-based services
  - Data communications services ranging from low-speed to very high-speed interconnections using latest technologies like Asynchronous Transfer Mode (ATM) and Frame Relay
  - Special arrangements for mission-critical users (e.g., high-availability circuits, national security and emergency users)
  - International services

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Background (Continued)

- GSA has awarded contracts for FTS2001 services to:
  - Sprint on December 18, 1998
  - MCI WorldCom on January 12, 1999
- Each contract is for four base years with four one-year options, and each vendor is guaranteed minimum revenues of $750 million over the life of the contract

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Background (Continued)

- Other service providers may also offer FTS2001 services through programs such as GSA's Metropolitan Area Acquisition (MAA) program, but only when three conditions are met
  - When allowed by law and regulation
  - After the FTS2001 contract(s) one-year forbearance period
  - When GSA determines it is in the "best interest" of the government

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Objective, Scope, and Methodology

The objective of our review was to evaluate GSA's revenue estimation process and answer the following questions posed in the Committee's January 5 letter:

1. What percentage are the MRGs of the FTS 2001 contracts?
2. When are the MRGs likely to be satisfied?
3. What sensitivities are there in each of the estimates provided in (1) and (2)? What factors could significantly alter these estimates?
4. If additional competitors were permitted to compete for the FTS 2001 business, how might that competition affect the estimates provided? Would reduced prices/transition costs brought about by such competition offset the impact on estimates provided?

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Objective, Scope, and Methodology (Continued)

- To meet our objective, we
  - Interviewed GSA FTS2001 program managers, their Mitretek support team, and telecommunications managers in selected agencies to understand their FTS2001 forecasting processes
  - Analyzed the process and assumptions used to develop program revenue estimates and timeframes for meeting the MRGs
  - Used forecasting and telecommunications experts from Technology Futures, Inc. (TFI), to (1) assist our review of Mitretek and selected agency telecommunications forecasting processes and (2) develop an independent high-level estimate of potential FTS2001 program revenues
- We did not independently validate Mitretek's contract pricing calculations used to develop revenue estimates

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Objectives, Scope, and Methodology (Continued)

We conducted our review work between January 12, 2000 and February 28, 2000 at GSA FTS offices, Fairfax, VA; Mitretek offices, McLean, VA; the Department of Energy, Germantown, MD; the Defense Information Systems Agency, Arlington, VA; and Department of the Treasury and Department of Justice offices in Washington, DC; in accordance with generally accepted government auditing standards.

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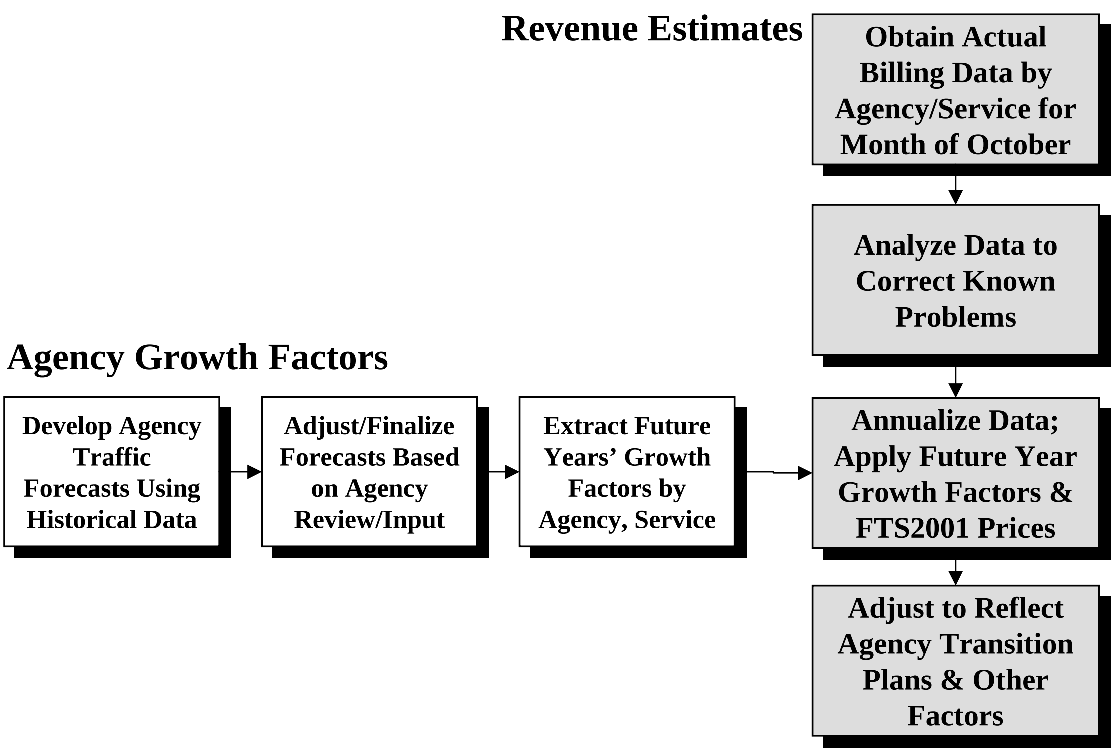
GSA Revenue Estimation Process



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Observations on Revenue Estimation Process

- The GSA/Mitretek process relies on historic and known agency requirements for FTS2001 services and works as intended to produce an estimate of program revenues
- Our independent, high-level TFI revenue forecast model using the most currently available traffic and pricing forecasts produced essentially the same revenue estimate
- For future MRG analyses, aspects of the process could be improved by:
  - Using the most current traffic and forecast data
  - Documenting changes in data and assumptions
  - Formalizing the process and verifying results

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Process Improvement: Using Current Data

- Recent FTS2001 revenue estimates are primarily based on historical usage information that is several years old:
  - Oct. 1995 FTS2000 traffic data (adjusted in the aggregate to approximate actual Oct. 1998 traffic)
  - Agency usage growth factors developed in 1996

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Process Improvement: Using Current Data

- More recent traffic data (Oct. 1998) was not used because there was insufficient time to analyze the data and translate it into usable form
- Updated agency growth factors were developed during 1999, but were only used for certain data services
- Preliminary Mitretek analysis indicates that using the more current data & growth factors increases the FTS2001 revenue estimate by about $67 million (3 percent)

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Process Improvement: Quality control

- Mitretek revenue estimation analyses are based on ad hoc processes that rely on staff to check their own work for accuracy--there was no independent verification
- For example, while reviewing these processes with us, Mitretek identified and corrected errors including
  - Additional features and fixed costs not included in revenue ($260 million)
  - 8 percent GSA overhead erroneously included as revenue ($50 million)
  - IRS 800 service revenue erroneously included for 2003 ($20 million)

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Process Improvement: Quality control

- In addition, changes to agencies' FTS2001 usage forecast submissions were not always documented, making it difficult to account for differences shown in the final forecasts used to calculate growth factors

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MRGs Relative to Total Revenues

What percentage are the MRGs of the FTS 2001 contracts?

- Compared to GSA's initial estimates of contract value (i.e., more than $5 billion) made at the time of contract award (December 1998, January 1999), the MRGs represented about one-third of estimated total program revenues
- However, when compared to GSA’s February 2000 estimates of only approximately $2.3 billion, the MRGs represent about two-thirds of estimated total program revenues

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Timeframe for Satisfying MRGs

When are the MRGs likely to be satisfied?

- In January 2000, GSA and their Mitretek support team completed an analysis at our request to estimate a timetable for satisfying the FTS2001 MRGs
- This analysis is based on adjusted historical data projected for the near-term, assumes the current transition schedule, and has been adjusted to correct identified errors
- As illustrated on the next page, the corrected analysis shows the MRGs satisfied for both vendors in FY04 (contract year 6)
- But analysis results also showed that any further revenue reductions could move the MRG date out even later

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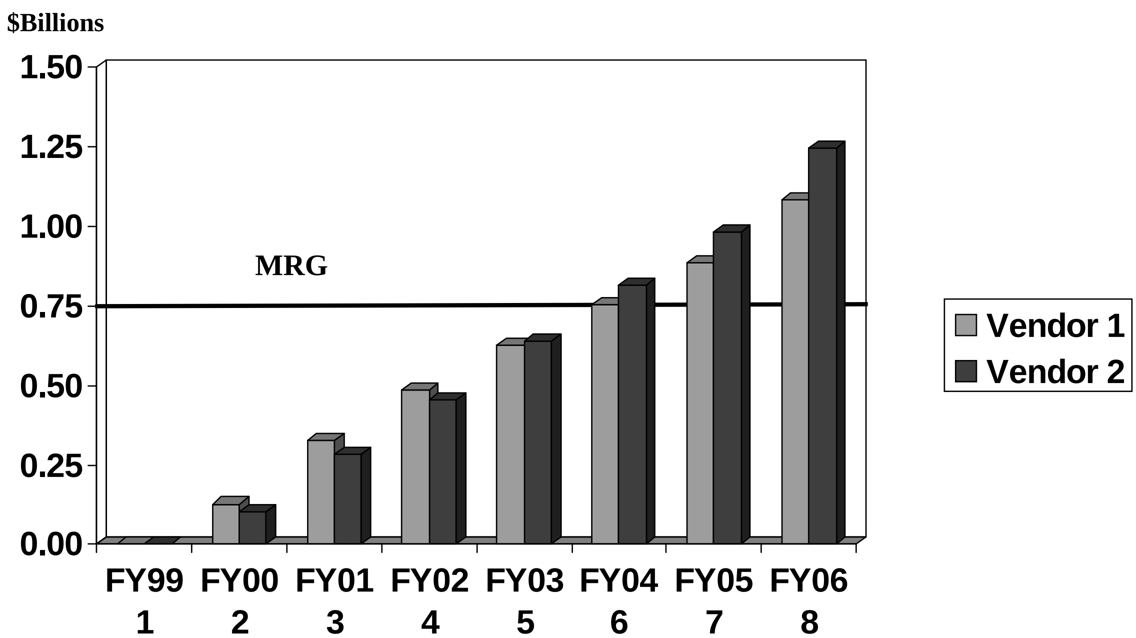
Timeframe for Satisfying MRGs (Continued)

FTS2001 Cumulative Revenue



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Key Factors and Sensitivities

What sensitivities are there in each of the estimates provided in questions (1) and (2)?

What factors could significantly alter these estimates?

- Three primary factors could significantly alter estimates of total program revenue and corresponding timeframes for satisfying the MRGs:
  - Pricing
  - Service demand
  - Transition progress

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Key Factors and Sensitivities: Pricing

- FTS2001 revenues could be affected by price reductions resulting from several factors including:
  - Price management mechanisms included in the contract
  - Potential price matching for similar services between the two incumbent service providers
  - The addition of competing MAA service providers to the FTS2001 program
- Assuming demand for services remains constant, any price decreases would increase MRGs as a percentage of estimated program revenues, and therefore, increase the timeframe to meet the MRGs

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Key Factors and Sensitivities: Service Demand

- By relying on historic and known agency requirements, the GSA/Mitretek process produces a conservative estimate of program revenues
- We noted that forecasted growth rates in federal agency data communications services are lower than private sector trends
- TFI examined agency forecasts in light of commercial trends and completed a sensitivity analysis indicating that program revenues could be significantly higher if a more aggressive data communications growth rate were assumed

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Key Factors and Sensitivities: Service Demand (Continued)

- However, given the general lack of experience under the FTS2001 program and that it is not mandatory, it is uncertain at this time how much, if any, additional growth in data communications requirements would accrue to the FTS2001 program
- Further, the largest amount of this growth would occur in the out-years of the FTS2001 program and, as a result, would not reduce the estimated MRG timeframe

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Key Factors and Sensitivities: Transition Progress

- FTS2001 is currently in the second year of the base four-year contracts, but transition to these new contracts has yet to be completed
- As of February 17, with only about 3 months remaining of the original planned 18-month transition schedule, GSA managers reported that only 26 percent of agency site transitions were complete. They expect transitions to be completed by December 2000.
- Transition delays limit the revenue accruing against MRGs
  - Current revenue estimates, which reflect agency transition schedules as of January 2000, attribute more than $450 million in lost revenue to transition delay
  - Additional delays would further decrease program revenues and increase the timeframe to meet the MRGs

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Key Factors and Sensitivities: Transition Progress (Cont.)

- GSA managers have cited several reasons for transition delay:
  - The slow pace of agency vendor selection and transition planning (vendor selections by large agencies were completed in Nov. 1999)
  - Y2K concerns that caused agencies to delay transition until after the first of the year

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Key Factors and Sensitivities: Transition Progress (Cont.)

- Agencies also cite vendor issues for transition delay and failure to complete transition orders on time:
  - Poor communication between the FTS2001 service providers and agency, as well as within vendor organizations
  - Lack of agreements between the government and a prior FTS2000 vendor to support transition activities
  - Poor vendor coordination with local exchange carriers

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Key Factors and Sensitivities: Transition Progress (Cont.)

- The FTS2001 program is being adversely impacted by transition delays. For example:
  - On February 3, 2000, the Office of Comptroller of the Currency (OCC) suspended its transition efforts citing vendor performance problems. However, Treasury officials responsible for managing participation in this program report that OCC has since restarted transition with its assigned vendor.
  - IRS is deferring its transition of its toll free 800 service until as late as September 2003, citing risk to their tax modernization efforts as a factor in its decision

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Key Factors and Sensitivities: Transition Progress (Cont.)

- GSA and Interagency Management Council managers have been meeting with agency and vendor staff to improve transition execution
- In response, the current FTS2001 vendors are taking steps to add staff and improve service ordering and transition processes
- Further, GSA executed a transition agreement in January 2000 supporting the AT&T/MCI transition effort
- An agreement supporting the AT&T/Sprint transition effort is still pending

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Potential Effects of Additional Competition

If additional competitors were permitted to compete for the FTS2001 business, how might that competition affect the estimates provided?

- Additional competition could yield price reductions, cause further transition delays, and reduce demand for services from existing FTS2001 vendors. This, in turn, would affect the estimates provided by increasing the percentage of the total contract cost that the MRGs represent and the timetable for satisfying the MRGs.
- For example, a recent GSA analysis showed that with less than a 20 percent decline in total estimated program revenue, vendor MRGs would not be satisfied until contract year 8

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Potential Effects of Additional Competition (Continued)

Would reduced prices/transition costs brought about by such competition offset the impact on estimates provided?

- Not knowing what an added competitor's reduced prices might be, it is difficult to quantify the specific impact of reduced pricing on MRG timelines or obligations
- Further, to fully evaluate this offset, other factors must be considered, including:
  - expected benefit of transition cost reductions
  - net effect on MRG obligations

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Potential Effects of Additional Competition (Continued)

- Transition costs: Transition cost savings would only accrue if the competitor added to the program were the incumbent FTS2000 service provider and where transition costs have not yet been incurred
- Some of these costs have already been incurred
  - For example, GSA has obligated one-third of its transition fund to date
  - Similarly, for DOD, the largest FTS2001 customer, managers told us that at this stage of transition planning and implementation, most of their transition funds have already been expended or are committed

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Potential Effects of Additional Competition (Continued)

- Obligations: Reduction in revenues to current FTS 2001 service providers would increase the timeframe for satisfying contract MRGs. If the MRGs are not satisfied, GSA may be liable for additional payments to the contractors.

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Potential Areas for GSA Improvement

- GSA envisioned additional FTS2001 competition in its overall FTS planning and MAA acquisition program, but any decision to add competition must consider the government's ability to meet the contract MRGs
- Given the need to closely manage FTS2001 MRGs, GSA needs to strengthen its revenue estimation process to reduce errors and improve consistency
- In addition, since MRG analysis is a key indicator in deciding when additional FTS2001 competition would be in the best interest of the government, the MRG analysis should be updated at least annually during the life of the contracts

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