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November 19, 2015

The Honorable Bill Shuster
Chairman
The Honorable Peter A. DeFazio
Ranking Member
Committee on Transportation & Infrastructure
House of Representatives
The Honorable Frank LoBiondo
Chairman
The Honorable Rick Larsen
Ranking Member
Subcommittee on Aviation
Committee on Transportation & Infrastructure
House of Representatives

Aviation Finance: Observations on the Effects of Budget Uncertainty on FAA

Since 2007, the Federal Aviation Administration (FAA) has operated and overseen the nation's aviation system amid ongoing budget uncertainty, an issue that has affected other federal agencies as well. This uncertainty is due to a protracted reauthorization process and timing issues associated with the budget and appropriations process. For instance, FAA experienced 23 authorizing extensions following the expiration of FAA's authorization in 2007 until the enactment of the FAA Modernization and Reform Act of 2012, as well as a sequestration and the partial shutdown of the federal government in 2013.[1] GAO has previously reported that aviation stakeholders are concerned that budget uncertainty makes it difficult for FAA simultaneously to operate the aviation system and implement air traffic control modernization through FAA's Next Generation Air Transportation System (NextGen).[2] Some aviation stakeholders also cite budget uncertainty as a justification for the restructuring of FAA's Air Traffic Organization (ATO).

In light of these issues and as Congress considers a long-term reauthorization of FAA, you asked us to examine the effects of past budget uncertainty on FAA. This report addresses five research questions:

(1) What is known about how past budget uncertainty has affected FAA's operations?
(2) How has past budget uncertainty affected NextGen implementation?
(3) How has FAA addressed budget uncertainty?

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[1]See Vision 100—Century of Aviation Reauthorization Act (Vision 100), Pub. L. No. 108-176 (2003), and the FAA Modernization and Reform Act of 2012, Pub. L. No. 112-95. The Airport and Airway Extension Act of 2015, Pub. L. No. 114-55, was enacted on September 30, 2015 and reauthorizes FAA for the period October 1, 2015 through March 31, 2016.

[2]GAO, *Air Traffic Control System*: *Selected Stakeholders' Perspectives on Operations, Modernization, and Structure*, GAO-14-770 (Washington, D.C.: Sept. 12, 2014).

(4) What lessons could be learned from efforts by other federal agencies to mitigate the effects of budget uncertainty?
(5) What are some potential alternative funding options for FAA and the advantages and disadvantages of those options?

On September 25, 2015, we provided your staff with a preliminary briefing on the results of our review; this report formally transmits the briefing slides that we updated to reflect the final results of our work (see encl. I).

To conduct this work, we reviewed and analyzed FAA's budget requests and enacted amounts, continuing resolutions, and authorizing legislation for fiscal years 2007–2015. We selected this time period because it covers a period of uncertainty for FAA with respect to its authorizing legislation and annual funding. We also reviewed relevant federal laws, regulations, agency guidance, and publicly available reports and testimonies issued by GAO, FAA, and aviation industry stakeholders. For all questions, we obtained written documentation from FAA and interviewed officials at FAA and the Office of Management and Budget (OMB). We also corroborated the examples of effects of budget uncertainty on FAA operations and NextGen implementation by reviewing and analyzing additional relevant data and documentation provided by FAA for the same time period. To assess the reliability of FAA's data, we reviewed existing information about the data and the systems that produced them, and determined that the data were sufficiently reliable for the purposes of this report. To determine what lessons could be learned from efforts by other federal agencies to mitigate the effects of budget uncertainty, we reviewed relevant GAO reports on the effects of the 2013 government shutdown, 2013 sequestration, and continuing resolutions.[3] We identified potential alternative funding options for FAA and their advantages and disadvantages, through a literature review of aviation stakeholder reports and prior GAO reports.

We conducted this performance audit from April 2015 through November 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In summary:

- According to FAA, past budget uncertainty has affected FAA's ability to perform its mission. Based on our review of FAA data and documentation, we were able to quantify some, but not all, effects on FAA operations, and a number of these effects are listed below. For example, FAA operations were affected during the week of April 21-27, 2013, as sequester-related air traffic controller furloughs delayed 7,099 flights, mostly in heavily air traffic-congested areas. Also, FAA implemented a hiring freeze at its air traffic controller training academy in Oklahoma City in response to the 2013 sequestration. According to FAA documentation, actual new hires in fiscal year 2013 totaled 554, a deficit of 761 new controllers when compared to the agency's planned 1,315 new hires for that year as stated in the fiscal year 2013 Controller Workforce Plan. As a result, FAA

[3]See for example, GAO, *2013 Government Shutdown: Three Departments Reported Varying Degrees of Impacts on Operations, Grants, and Contracts*, GAO-15-86 (Washington, D.C.: Oct. 15, 2014); *2013 Sequestration: Agencies Reduced Some Services and Investments, While Taking Certain Actions to Mitigate Effects*, GAO-14-244 (Washington, D.C.: Mar. 6, 2014); and *Budget Issues: Effects of Budget Uncertainty from Continuing Resolutions on Agency Operations*, GAO-13-464T (Washington, D.C.: Mar. 13, 2013).

had fewer air traffic controllers at the time of our review than projected in the fiscal year 2013 workforce plan, although other factors, such as FAA's recruitment and hiring practices, may also affect controller staffing. In addition, FAA reported that budget uncertainty due to the 2013 sequestration and government shutdown delayed FAA's deployment of new capabilities for high-priority modernization efforts, as well as FAA's ability to conduct inspections of drug and alcohol testing programs. Without a long-term authorization from 2007 through 2012, FAA delayed new investment decisions for FAA-sponsored airport projects. The lapse in FAA's authorization in 2011 specifically led to the stoppage of work on more than $10 billion in national airspace and support projects, and $2.5 billion in grants to new airport projects were withheld, according to FAA documentation we reviewed. Finally, we have previously concluded that operating under continuing resolutions limits management options and results in inefficiencies to agency operations.[4]

- According to FAA officials, past budget uncertainty has also affected FAA's ability to implement NextGen, although current segments of NextGen programs are generally on schedule. For instance, FAA stated that the final decision to implement Segment 1, Phase 2 of En Route Full Services of Data Communications (Data Comm) was delayed until late 2016 as a result of the 2013 government shutdown. Data Comm is designed to modernize controller-to-flight crew communication. In addition, sequestration delayed NextGen improvements scheduled for 2013 to optimize the use of airspace at two of five metroplex sites. "Metroplexes" are geographical areas that include several commercial and general aviation airports in close proximity (e.g., the D.C. Metroplex encompasses several major airports in the greater Washington, D.C. area, including Baltimore and Northern Virginia). According to FAA officials, delays in early segments of NextGen programs resulting from budget uncertainty may affect the implementation schedule thereby increasing overall NextGen costs, although the additional incremental costs associated with budget uncertainty are difficult to determine. According to FAA officials, past budget uncertainty has also delayed the benefits of NextGen programs, creating a lack of confidence among industry partners For instance, FAA has divided capital investments for both Data Comm and the suite of air traffic controller tools that support Performance Based Navigation (PBN), which is intended to deliver new routes and procedures that primarily use satellite-based navigation and on-board aircraft equipment to navigate with greater precision and accuracy through all phases of flight. According to FAA, these decisions raise concerns among industry partners about when the full benefits of Data Comm, PBN, and other NextGen programs will be realized. While early segments of FAA's key foundational programs, such as Data Comm, are generally on schedule, FAA officials stated that implementation of NextGen in future years is dependent on the timing and amount of future appropriations.
- FAA addresses budget uncertainty by following three general budgeting priorities: (1) maintaining high levels of safety in the National Airspace System (NAS); (2) minimizing effects on the NAS, such as operational delays; and (3) ensuring resources to respond to contingencies that affect safety and efficiency. During the 2013 sequestration, FAA officials stated that they focused on these priorities by first proposing to reduce staff hours at low activity air traffic control contract towers to minimize effects on the NAS while maintaining high levels of safety for the overall system. FAA also uses existing budget flexibilities to address budget uncertainty, although FAA cannot transfer

[4]GAO, *Continuing Resolutions: Uncertainty Limited Management Options and Increased Workload in Selected Agencies*, GAO-09-879 (Washington, D.C.: Sept. 24, 2009).

appropriated funds between its four main accounts.[5] FAA can reprogram up to $5 million or 10 percent, whichever is less, of the appropriations within an appropriations account without congressional consultation, but any reprogramming above this threshold requires consultation with Congress.[6] FAA officials said they perform below-threshold reprogramming on a regular basis. To mitigate the impact of budget uncertainty on FAA, the agency is seeking additional budget flexibility in its fiscal year 2016 budget request. This flexibility would allow FAA to transfer up to 10 percent of any of its four main budget accounts between the four accounts, provided that no account is increased by more than 10 percent and that the transfer is done in consultation with the Appropriations Committees. Finally, according to FAA officials, although the agency does not formally prepare contingency plans for all budget scenarios, it does conduct informal budget modeling for various funding scenarios and discusses options with OMB before making decisions on how to respond to budget uncertainty.

- Budget flexibility authorities held by some federal agencies may provide lessons for FAA management of budget uncertainty. Some federal agencies have authorities that are broader than FAA's authority. For example, we found that the Department of Defense has broad authority to transfer between appropriations accounts and to reprogram funds within an appropriations account. DOD relied on these flexibilities to mitigate the effects of sequestration in fiscal year 2013.[7] Other agencies, including the U.S. Departments of Agriculture and State, as well as the National Aeronautics and Space Administration, also have broader transfer authority. A number of other federal agencies, however, do not, including the U.S. Department of the Interior and the Environmental Protection Agency. As discussed earlier in this report, FAA is seeking additional authority in its fiscal year 2016 budget request. While transfer authority between FAA's four main budget accounts may provide additional flexibility, disadvantages include potentially less Congressional control and oversight of FAA's use of funds.
- Potential alternative funding and budgeting options exist—such as imposing direct user charges, issuing bonds, or restructuring FAA's Air Traffic Organization (ATO)—but may not fully address budget uncertainty. We identified these options through a review of reports by aviation stakeholders, policy think tanks, and prior GAO reports. For instance, in our prior work we concluded that user charges for FAA services could be implemented

[5]FAA has four main budget accounts, which receive separate appropriations, including (1) Operations; (2) Facilities and Equipment; (3) Research, Engineering, and Development; and (4) Grants-in-Aid for Airports. FAA can move appropriated funds through reprogrammings and transfers. A reprogramming is the shifting of funds from one activity to another within an appropriations account, while a transfer is the shifting of funds between appropriation accounts and requires specific statutory authority. The movement of funds between certain budget line items, or budget activities, within FAA's Operations account is also a transfer because those budget activities receive separate appropriations. However, FAA does not consider these budget activities to be separate appropriations, but instead describes them as purpose limitations within a lump sum appropriation. Therefore, FAA has indicated that it considers movement of funds between budget activities within the Operations account to be a reprogramming. However, the movement of funds between these budget activities would constitute a transfer. The fact that an appropriation for a specific purpose is included as an earmark in a general appropriation does not deprive it of its character as an appropriation for the particular purpose designated. *See e.g.*, B-287121, Nov. 7, 1997. Congress has granted FAA limited authority to transfer funds between these budget activities.

[6]Consultation procedures are set forth in Section 405 of Pub. L. No. 113-235.

[7]GAO, *Sequestration: Documenting and Assessing Lessons Learned Would Assist DOD in Planning for Future Budget Uncertainty*, GAO-15-470 (Washington, D.C.: May 27, 2015).

under the current FAA structure or a restructured ATO.[8] User charges, like current excise taxes, are tied to economic activity, and thus, revenues would fluctuate. The advantage of direct user charges is that such a system would encourage more efficient use of the air traffic control system by charging fees for particular air traffic control services, although the disadvantage is that during an economic downturn revenues would be expected to fall. In addition, potentially authorizing FAA to issue bonds to raise money in the capital market for infrastructure-related projects has advantages and disadvantages. The advantages include the potential for more stable funding for capital projects, as well as the ability to spread the costs over the project's lifetime. The disadvantages include increased financing costs due to interest payments over time and liability concerns. Finally, some aviation stakeholders have proposed restructuring FAA's Air Traffic Organization. Such a new organization would charge user fees to cover the costs of providing air traffic services. A restructured ATO may have more flexibility to fund air traffic system operations from various user fees and may be less subject to the uncertainties of the federal budget process, but this option would potentially lessen congressional control and oversight of air traffic control operations.

We are not making any recommendations in this report.

Agency Comments

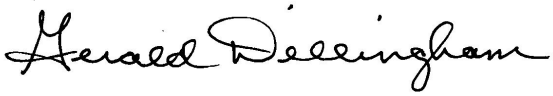
We provided a draft of this report to the Department of Transportation (DOT) and OMB for review and comment. DOT provided technical comments, which we incorporated where appropriate. OMB did not have comments on the report.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its issue date. At that time, we will send copies of this report to the appropriate congressional committees, Director of OMB, and the Secretary of Transportation. In addition, the report will be made available at no charge on the GAO website at http://www.gao.gov.

[8]GAO, *Aviation Finance: Observations on Potential FAA Funding Options*, GAO-06-973 (Washington, D.C.: Sept. 29, 2006).

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or DillinghamG@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff members who made key contributions to this report are listed in enclosure II.

Sincerely yours,



Gerald L. Dillingham, Ph.D.
Director, Civil Aviation Issues
Enclosures – 2

Enclosure 1: Powerpoint Briefing: Aviation Finance: Observations on the Effects of Budget Uncertainty on FAA

See Accessible PDF in portfolio

Enclosure II:
GAO Contact and Staff Acknowledgments
GAO Contact

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Staff Acknowledgments

In addition to the contact named above, Ed Laughlin (Assistant Director), Jonathan Carver, Jessica Du, James Geibel, Timothy Guinane, David Hooper, Elke Kolodinski, Janice Latimer, Hannah Laufe, Maureen Luna-Long, SaraAnn Moessbauer, Amanda Postiglione, and Amy Rosewarne were major contributors to this report.

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