

## Exhibit 300 FY2010

### FAAXX704: Automatic Dependent Surveillance-Broadcast (ADS-B)

#### Part I: Summary Information And Justification (All Capital Assets)

Description: In Part I, complete Sections A, B, C, and D for all capital assets (IT and non-IT). Complete Sections E and F for IT capital assets.

#### I.A. Overview (All Capital Assets)

Description: The following series of questions are to be completed for all investments.

I.A.1. Date of Submission:	2008-08-11
I.A.2. Agency:	021
I.A.3. Bureau:	12
I.A.4. Name of this Capital Asset: Description: (Up to 250 characters)	FAAXX704: Automatic Dependent Surveillance-Broadcast (ADS-B)
I.A.5. Unique Project (Investment) Identifier: Description: For IT investment only, see section 53. For all other, use agency ID system.	021-12-01-20-01-1230-00
I.A.6. What kind of investment will this be in FY2010? Description: Please NOTE: Investments moving to O&M in FY2010, with Planning/Acquisition activities prior to FY2010 should not select O&M. These investments should indicate their current status.	Mixed Life Cycle
I.A.8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap: Description: (Up to 2500 characters)	<p>The Surveillance and Broadcast Services Program (SBS) contributes to the achievement of the Federal Aviation Administration's Flight plan goal to "provide increased capacity in the United States airspace system that reduces congestion and meets projected demand." The SBS program is responsible for implementing Automatic Dependant Surveillance–Broadcast (ADS-B) a space based air traffic control and surveillance system that is designed to improve air traffic information for the use of pilots and air traffic controllers (ATCs) enabling better situational awareness using more accurate, and timely data. Currently the National Airspace System (NAS) is monitored primarily through the use of radar, a surveillance system that is essentially a product of 1940's World War II technology. While the system is the safest it's ever been, there is much evidence that the current surveillance technology will be outpaced by increased air traffic demand. The current Terminal Area Forecast projects an increase from 740 million in 2007 to 1 billion passengers on national carriers alone by 2015. Estimates show a projected increase of international flights by 70% in that same timeframe. By 2025 the numbers are forecasted to nearly double. ADS-B will enable surveillance coverage in areas that were not technically feasible such as mountainous regions and areas where radar coverage did not exist such as the Gulf of Mexico and remote areas in Alaska. ADS-B is designed to increase real-time situational awareness in the cockpit, freeing the system of much of the ground-based hardware and procedures. Both pilots and ATCs will see radar-like displays with highly accurate traffic data from satellites – displays that update in real time and don't degrade with distance or terrain. The system will also give pilots access to weather services, terrain maps and flight information services. The improved situational awareness will mean that pilots will be able to fly closer together with the same margin of safety, with less assistance from ATCs, resulting in significant increases in airspace capacity and more efficient processes. ADS-B in addition to providing a more accurate surveillance system will also serve as the infrastructure for additional services in support of the FAA's Next Generation Air Transportation System (NextGen). The new ADS-B infrastructure is scheduled to be completed and operational in FY 2014 when it will become steady state through the end of the program in 2035.</p>
I.A.9. Did the Agency's Executive/Investment Committee approve this request?	yes
I.A.9.a. If "yes," what was the date of this approval?	2007-08-27
I.A.10. Did the Project Manager review this Exhibit?	yes
I.A.12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project?	yes
I.A.12.a. Will this investment include electronic assets (including computers)?	yes
I.A.12.b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)	no
I.A.12.b.1. If "yes," is an ESPC or UESC being used to help fund this investment?	
I.A.12.b.2. If "yes," will this investment meet sustainable design principles?	
I.A.12.b.3. If "yes," is it designed to be 30% more energy efficient than relevant code?	
I.A.13. Does this investment directly support any of the PMA initiatives?	no
I.A.13.a. If "yes," select all that apply:	

I.A.13.b. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? (e.g. If E-Gov is selected, is it an approved shared service provider or the managing partner?) Description: (Up to 500 characters)	
I.A.14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? Description: (For more information about the PART, visit <a href="http://www.whitehouse.gov/omb/part">www.whitehouse.gov/omb/part</a> .)	yes
I.A.14.a. If "yes," does this investment address a weakness found during a PART review?	yes
I.A.14.b. If "yes," what is the name of the PARTed program?	10001121 - FAA Air Traffic Services
I.A.14.c. If "yes," what rating did the PART receive?	Adequate
I.A.15. Is this investment for information technology?	yes
I.A.16 What is the level of the IT Project? (per CIO Council PM Guidance) Description: Level 1 - Projects with low-to-moderate complexity and risk. Example: Bureau-level project such as a stand-alone information system that has low- to-moderate complexity and risk. Level 2 - Projects with high complexity and/or risk which are critical to the mission of the organization. Examples: Projects that are part of a portfolio of projects/systems that impact each other and/or impact mission activities. Department-wide projects that impact cross-organizational missions, such as an agency-wide system integration that includes large scale Enterprise Resource Planning (e.g., the DoD Business Mgmt Modernization Program). Level 3 - Projects that have high complexity, and/or risk, and have government-wide impact. Examples: Government-wide initiative (E-GOV, President's Management Agenda). High interest projects with Congress, GAO, OMB, or the general public. Cross-cutting initiative (Homeland Security).	Level 3
I.A.17. In addition to the answer in 1.A.11.d, what project management qualifications does the Project Manager have? (per CIO Council PM Guidance)	(1) Project manager has been validated as qualified for this investment
I.A.18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4-FY 2008 agency high risk report? (per OMB Memorandum M-05-23)	yes
I.A.19. Is this a financial management system?	no
I.A.19.a. If "yes," does this investment address a FFMIA compliance area?	
I.A.19.a.1. If "yes," which compliance area: Description: (Up to 250 characters)	
I.A.19.a.2. If "no," what does it address? Description: (Up to 500 characters)	
I.A.19.b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52 Description: (Up to 2500 characters)	
I.A.20. What is the percentage breakout for the total FY2010 funding request for the following? Description: (This should total 100%)	
I.A.20.a. Hardware	19
I.A.20.b. Software	16
I.A.20.c. Services	34
I.A.20.d. Other	31
I.A.21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities?	yes
I.A.23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval?	yes
I.A.24. Does this investment directly support one of the GAO High Risk Areas?	no

## I.B. Summary of Spending (All Capital Assets)

### I.B.1 Summary of Spending Table

Description: Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated "Government FTE Cost," and should be excluded from the amounts shown for "Planning," "Full Acquisition," and "Operation/Maintenance." The "TOTAL" estimated annual cost of the investment is the sum of costs for "Planning," "Full Acquisition,"

and "Operation/Maintenance." For Federal buildings and facilities, life-cycle costs should include long-term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

Note: For the multi-agency investments, this table should include all funding (both managing partner and partner agencies). Government FTE Costs should not be included as part of the TOTAL represented.

I.B.1.a. Summary of Spending for Project Phases

	PY-1 and earlier	PY 2008	CY 2009	BY 2010
Planning	\$9.900	\$0.000	\$0.000	\$0.000
Acquisition	\$95.000	\$109.400	\$305.900	\$200.400
Subtotal Planning and Acquisition	\$104.900	\$109.400	\$305.900	\$200.400
Operations and Maintenance	\$1.592	\$1.849	\$2.938	\$4.618
TOTAL	\$106.492	\$111.249	\$308.838	\$205.018
Government FTE Costs	\$7.555	\$9.202	\$7.577	\$6.809

I.B.1.b. Summary of Spending for Project Phases (Government FTE Costs Only)

	PY-1 and earlier	PY 2008	CY 2009	BY 2010
Number of FTE represented by cost	52	61	48	41

I.B.2. Will this project require the agency to hire additional FTE's? yes

I.B.2.a. If "yes," How many and in what year?  
 Description: (Up to 500 characters) 2FTEs in FY2009, 2 FTEs in FY2010, 1 FTE in FY2011, 1 FTE in FY2012, 1 FTE in FY2013, 1 FTE in FY2014.

I.B.3. If the summary of spending has changed from the FY2009 President's budget request, briefly explain those changes:  
 Description: (Up to 2500 characters)

The increase to total F&E funds is reflecting a congressional add for \$9.3M that was provided to fund the acceleration of Future Air to Air Applications Development and was provided to the program in Fiscal Year 2008. There is no impact to the program schedule. The activities have been incorporated into the current schedule and will not affect the critical path. This funding was documented in a Baseline Management Notice (BMN) on April 21, 2008 and incorporated to the program's baseline.

**I.D. Performance Information (All Capital Assets)**

I.D.1. Performance Information Table

Description: In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures (indicators) must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative measure.

Agencies must use the following table to report performance goals and measures for the major investment and use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for each of the four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov. The table can be extended to include performance measures for years beyond the next President's Budget.

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Grouping	Measurement Indicator
2006	Reduced Congestion	Processes and Activities	Efficiency	Develop and Validate performance baseline and metrics.
2006	Reduced Congestion	Technology	Accessibility	Develop and Validate performance baseline and metrics.
2006	Reduced Congestion	Technology	Data Reliability and Quality	Develop and Validate performance baseline and metrics.
2006	Reduced Congestion	Technology	Availability	Develop and Validate performance baseline and metrics.
2006	Reduced Congestion	Technology	Data Reliability and Quality	Develop and Validate performance baseline and metrics.
2006	Reduced Congestion	Technology	Availability	Develop and Validate performance baseline and

				metrics.
2007	Safety	Customer Results	Customer Impact or Burden	CONUS, HI and Caribbean Controlled Flight into Terrain, Weather-related, and Mid-air Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2007	Safety	Customer Results	Customer Impact or Burden	Alaska "CAPSTONE" Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2007	Reduced Congestion	Customer Results	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions
2007	Safety	Mission and Business Results	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft
2007	Safety	Mission and Business Results	Air Transportation	Alaska "CAPSTONE" Aviation Accident Rate for equipped aircraft
2007	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: FIS-B latency
2007	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: TIS-B latency
2007	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-R latency
2007	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B latency
2007	Safety	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information. Technical Performance Measures modeling results for 2007/2008 will further define additional TPMs for future years
2007	Safety	Processes and Activities	Efficiency	Time for aircrew to acquire weather information. Technical Performance Measures modeling results for 2007/2008 will further define additional TPMs for future years.
2007	Reduced Congestion	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
2007	Safety	Technology	Accessibility	Percent of Alaska "CAPSTONE" operations inside FIS-B coverage areas
2007	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: Percent of FIS-B service availability
2007	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: Percent of TIS-B service availability
2007	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability
2008	Safety	Customer Results	Customer Impact or Burden	CONUS, HI and Caribbean Controlled Flight into Terrain, Weather-related, and Mid-air Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2008	Safety	Customer Results	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2008	Safety	Mission and Business Results	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft
2008	Safety	Mission and Business Results	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft
2008	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: FIS-B latency
2008	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: TIS-B latency
2008	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast

				Services: ADS-R latency
2008	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B latency
2008	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information. Technical Performance Measures modeling results for 2007/2008 will further define additional TPMs for future years.
2008	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire weather information. Technical Performance Measures modeling results for 2007/2008 will further define additional TPMs for future years.
2008	Reduced Congestion	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
2008	Safety	Technology	Accessibility	Coverage area contains 42% of Alaska Operations, based on current system coverage to be replaced by National System Coverage in FY09.
2008	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: Percent of FIS-B service availability
2008	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: Percent of TIS-B service availability
2008	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability
2009	Safety	Customer Results	Customer Impact or Burden	CONUS, HI and Caribbean Controlled Flight into Terrain, Weather-related, and Mid-air Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2009	Safety	Customer Results	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2009	Safety	Mission and Business Results	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft
2009	Safety	Mission and Business Results	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft
2009	Reduced Congestion	Mission and Business Results	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions
2009	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: FIS-B latency
2009	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: TIS-B latency
2009	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-R latency
2009	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B latency
2009	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information.
2009	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire weather information
2009	Safety	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
2009	Safety	Technology	Accessibility	Percent of Alaska operations inside FIS-B coverage areas
2009	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: FIS-B service availability
2009	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: TIS-B service availability
2009	Reduced Congestion	Technology	Availability	Expansion of Broadcast

				Services: ADS-R service availability
2010	Safety	Customer Results	Customer Impact or Burden	CONUS, HI and Caribbean Controlled Flight into Terrain, Weather-related, and Mid-air Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2010	Safety	Customer Results	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2010	Reduced Congestion	Customer Results	Customer Impact or Burden	Gulf of Mexico, Low-altitude: Average passenger delay of IFR flights in low-altitude sector during IMC conditions
2010	Reduced Congestion	Customer Results	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions
2010	Safety	Mission and Business Results	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft
2010	Safety	Mission and Business Results	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft
2010	Reduced Congestion	Mission and Business Results	Air Transportation	Gulf of Mexico, Low-altitude: Average block delay of IFR flights in low-altitude sector during IMC conditions
2010	Reduced Congestion	Mission and Business Results	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions
2010	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: FIS-B latency
2010	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: TIS-B latency
2010	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-R Latency
2010	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency
2010	Reduced Congestion	Processes and Activities	Cycle Time	CDTI carrier operations & Gulf of Mexico - Low & high altitude: Terminal ATC surveillance application latency
2010	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information.
2010	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire weather information
2010	Reduced Congestion	Processes and Activities	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions
2010	Reduced Congestion	Processes and Activities	Efficiency	Gulf of Mexico, Low-altitude: IFR capacity of low-altitude sector after improved services (communications, weather, surveillance)
2010	Safety	Technology	Availability	Gulf of Mexico, Low-altitude: Availability of upgraded communications and weather stations in low-altitude Gulf of Mexico sector
2010	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: FIS-B service availability
2010	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: TIS-B service availability
2010	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability
2010	Reduced Congestion	Technology	Availability	CDTI carrier operations & Gulf of Mexico - Low & high altitude: ADS-B service availability

2010	Safety	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
2010	Safety	Technology	Accessibility	Percent of Alaska operations inside FIS-B coverage areas
2011	Reduced Congestion	Customer Results	Customer Impact or Burden	CONUS, HI and Caribbean Controlled Flight into Terrain, Weather-related, and Mid-air Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2011	Safety	Customer Results	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2011	Reduced Congestion	Customer Results	Customer Impact or Burden	Gulf of Mexico, Low-altitude: Average passenger delay of IFR flights in low-altitude sector during IMC conditions
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2011	Safety	Mission and Business Results	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft
2011	Safety	Mission and Business Results	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft
2011	Reduced Congestion	Mission and Business Results	Air Transportation	Gulf of Mexico, Low-altitude: Average block delay of IFR flights in low-altitude sector during IMC conditions
2011	Reduced Congestion	Mission and Business Results	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions
2011	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: FIS-B latency
2011	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: TIS-B latency
2011	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-R Latency
2011	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency
2011	Reduced Congestion	Processes and Activities	Cycle Time	CDTI carrier operations & Gulf of Mexico - Low & high altitude: Terminal ATC surveillance application latency
2011	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information.
2011	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire weather information
2011	Reduced Congestion	Processes and Activities	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions
2011	Reduced Congestion	Processes and Activities	Efficiency	Gulf of Mexico, Low-altitude: IFR capacity of low-altitude sector after improved services (communications, weather, surveillance)
2011	Safety	Technology	Availability	Gulf of Mexico, Low-altitude: Availability of upgraded communications and weather stations in low-altitude Gulf of Mexico sector
2011	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: FIS-B service availability
2011	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: TIS-B service availability
2011	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability



2011	Reduced Congestion	Technology	Availability	CDTI carrier operations & Gulf of Mexico - Low & high altitude: ADS-B service availability
2011	Safety	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
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2012	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency
2012	Reduced Congestion	Processes and Activities	Cycle Time	CDTI carrier operations & Gulf of Mexico - Low & high altitude: Terminal ATC surveillance application latency
2012	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information.
2012	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire weather information
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2012	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: FIS-B service availability
2012	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability



2012	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability
2012	Reduced Congestion	Technology	Availability	CDTI carrier operations & Gulf of Mexico - Low & high altitude: ADS-B service availability
2012	Safety	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
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2013	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency
2013	Reduced Congestion	Processes and Activities	Cycle Time	CDTI carrier operations & Gulf of Mexico - Low & high altitude: Terminal ATC surveillance application latency
2013	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information.
2013	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire weather information
2013	Reduced Congestion	Processes and Activities	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions
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2013	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: TIS-B service availability

2013	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability
2013	Reduced Congestion	Technology	Availability	CDTI carrier operations & Gulf of Mexico - Low & high altitude: ADS-B service availability
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2013	Safety	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
2013	Safety	Technology	Accessibility	Percent of Alaska operations inside FIS-B coverage areas
2014	Safety	Customer Results	Customer Impact or Burden	CONUS, HI and Caribbean Controlled Flight into Terrain, Weather-related, and Mid-air Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft
2014	Reduced Congestion	Customer Results	Customer Impact or Burden	Gulf of Mexico, Low-altitude: Average passenger delay of IFR flights in low-altitude sector during IMC conditions
2014	Reduced Congestion	Mission and Business Results	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions
2014	Safety	Mission and Business Results	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft
2014	Safety	Mission and Business Results	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft
2014	Reduced Congestion	Mission and Business Results	Air Transportation	Gulf of Mexico, Low-altitude: Average block delay of IFR flights in low-altitude sector during IMC conditions
2014	Reduced Congestion	Customer Results	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions
2014	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: FIS-B latency
2014	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: TIS-B latency
2014	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-R Latency
2014	Reduced Congestion	Processes and Activities	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency
2014	Reduced Congestion	Processes and Activities	Cycle Time	CDTI carrier operations & Gulf of Mexico - Low & high altitude: Terminal ATC surveillance application latency
2014	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire weather information
2014	Reduced Congestion	Processes and Activities	Efficiency	Time for aircrew to acquire proximate traffic information.
2014	Reduced Congestion	Processes and Activities	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions
2014	Reduced Congestion	Processes and Activities	Efficiency	Gulf of Mexico, Low-altitude: IFR capacity of low-altitude sector after improved services (communications, weather, surveillance)
2014	Safety	Technology	Availability	Gulf of Mexico, Low-altitude: Availability of upgraded communications and weather stations in low-altitude Gulf of Mexico sector
2014	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: FIS-B service availability

2014	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: TIS-B service availability
2014	Reduced Congestion	Technology	Availability	Expansion of Broadcast Services: ADS-R service availability
2014	Reduced Congestion	Technology	Availability	CDTI carrier operations & Gulf of Mexico "Low & high altitude: ADS-B service availability
2014	Reduced Congestion	Technology	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
2014	Safety	Technology	Accessibility	Percent of Alaska operations inside FIS-B coverage areas
2014	Safety	Customer Results	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft

### I.F. Enterprise Architecture (EA) (IT Capital Assets only)

**Description:** In order to successfully address this area of the capital asset plan and business case, the investment must be included in the agency's EA and Capital Planning and Investment Control (CPIC) process and mapped to and supporting the FEA. The business case must demonstrate the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.

I.F.1. Is this investment included in your agency's target enterprise architecture?	yes
I.F.1.a. If "no," please explain why? Description: (Up to 2500 characters)	
I.F.2. Is this investment included in the agency's EA Transition Strategy?	yes
I.F.2.a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment. Description: (Up to 500 characters)	Automatic Dependent Surveillance-Broadcast (ADS-B)
I.F.2.b. If "no," please explain why? Description: (Up to 2500 characters)	
I.F.3. Is this investment identified in a completed and approved segment architecture?	yes
I.F.3.a. If "yes," provide the six digit code corresponding to the agency segment architecture. The segment architecture codes are maintained by the agency Chief Architect. For detailed guidance regarding segment architecture codes, please refer to <a href="http://www.egov.gov">http://www.egov.gov</a> . Description: (In the format "XXX-000")	102-000

#### I.F.4. Service Component Reference Model (SRM) Table

**Description:** Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to <http://www.egov.gov>.

- a. Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.
- b. A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.
- c. 'Internal' reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. 'External' reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.
- d. Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the percentage of the BY requested funding amount transferred to another agency to pay for the service. The percentages in this column can, but are not required to, add up to 100%.

Agency Component Name	Agency Component Description	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused - Component Name (b)
Aircraft-to-Aircraft Separation (ATC-Separation Assurance):	Aircraft are separated from other known aircraft in the terminal, en route, and oceanic environments. Separation assurance involves the application of separation standards to ensure aircraft remain an appropriate minimum distance or altitude from other known aircraft. Standards are	Visualization	Mapping / Geospatial / Elevation / GPS	

	defined for aircraft based on aircraft type, size, equipment, and for operating in different environments. (NAS ATC-Separation Assurance):			
Aircraft-Terrain-Obstacles (ATC-Separation Assurance)	Aircraft are separated from terrain and obstacles using published safety zones and processing position and intent information. Aircraft positions are derived from navigational systems, surveillance information, visual orientation, and position reports to ensure an aircraft's trajectory maintains a minimum safe distance from ground, mountainous terrain, and man-made obstacles. (NAS ATC-Separation Assurance)	Visualization	Mapping / Geospatial / Elevation / GPS	
Traffic Advisory (ATC-Advisory Services)	Traffic advisories are provided to alert aircraft to potential conflicts with others on the surface or in-flight. For example, traffic advisories are provided to aircraft or other flight objects that are in the proximity of hot air/gas balloons, missile launches, or other potential hazards. Traffic advisories for aircraft on the surface include the number, type, position, and intent of the ground traffic. (NAS ATC-Advisory Services)	Visualization	Mapping / Geospatial / Elevation / GPS	
Weather Advisories Capability (ATC-Advisory Services)	ATC Advisories - Weather information is available either automatically or manually through communication with ATC and other facilities. For example, pilots receive weather advisories from automated surface observing systems and other systems, ATC facilities, and aircraft operations centers (AOCs). Advisories provide both routine and hazardous weather information and/or flight conditions at airports or along a flight path. (NAS ATC-Advisory Services)	Visualization	Mapping / Geospatial / Elevation / GPS	

#### I.F.5. Technical Reference Model (TRM) Table

Description: To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

- a. Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications.
- b. In the Service Specification field, agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

FEA SRM Component (a)	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification (b) (i.e., vendor and product name)
Mapping / Geospatial / Elevation / GPS	Component Framework	Data Interchange	Data Exchange	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Component Framework	User Presentation / Interface	Content Rendering	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Access and Delivery	Access Channels	Other Electronic Channels	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Interface and Integration	Interoperability	Data Transformation	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Platform and Infrastructure	Database / Storage	Database	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Platform and Infrastructure	Software Engineering	Test Management	ITT Corporation

I.F.6. Will the application leverage existing components and/or applications across the Government (e.g. USA.gov, Pay.gov, etc.)?	no
I.F.6.a. If "yes," please describe. Description: (Up to 2500 characters)	
<b>Part IV: Planning for "Multi-Agency Collaboration" ONLY</b>	
Description: Part IV should be completed only for investments identified as an E-Gov initiative, a Line of Business (LOB) Initiative, or a Multi-Agency Collaboration effort. The "Multi-Agency Collaboration" choice should be selected in response to Question 6 in Part I, Section A above. Investments identified as "Multi-Agency Collaboration" will complete only Parts I and IV of the exhibit 300.	
<b>IV.A. Multi-Agency Collaboration Oversight (All Capital Assets)</b>	
Description: Multi-agency Collaborations, such as E-Gov and LOB initiatives, should develop a joint exhibit 300.	
IV.A.1. Stakeholder Table Description: As a joint exhibit 300, please identify all the agency stakeholders (all participating agencies, this should not be limited to agencies with financial commitment). All agency stakeholders should be listed regardless of approval. If the partner agency has approved this joint exhibit 300 please provide the date of approval.	
IV.A.9. Will the selected alternative replace a legacy system in-part or in-whole?	
IV.A.9.a. If "yes," are the migration costs associated with the migration to the selected alternative included in this investment, the legacy investment, or in a separate migration investment?	
IV.A.9.b. If "yes," please provide the following information:	