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

# Section A: Overview (All Capital Assets)

1. Date of Submission:	8/31/2007
2. Agency:	Department of Transportation
3. Bureau:	Federal Aviation Administration
4. Name of this Capital Asset:	FAAXX704: Automatic Dependent Surveilance-Broadcast (ADS-B), of the Surveillance and Broadcast Services Program
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.)	021-12-01-20-01-1230-00
6. What kind of investment will this be in FY2009? (Please NOTE: Investments moving to O&M in FY2009, with Planning/Acquisition activities prior to FY2009 should not select O&M. These investments should indicate their current status.)	Mixed Life Cycle
7. What was the first budget year this investment was submitted to OMB?	FY2007
8. Provide a brief summary and justification for this investment in whole an identified agency performance gap:	ent, including a brief description of how this closes in part or
The National Airspace System(NAS) is experiencing rising desurveillance. The ADS-B provides new surveillance solutions stations for improved accuracy and update rates. The ground Broadcast(TIS-B) and Flight Information Services-Broadcast broadcast services system(BSS), provide shared situational if flight notices) between pilots and Air Traffic Control(ATC). The decrease the rate of accidents and incursions, improve eff Within the overall Next Generation Transportation System(N foundation for the realization of operational improvements. The SBS program integrated the existing Capstone system in statewide surveillance and broadcast services in the future. On 8/27/07 the SBS program, which is responsible for the in JRC baseline decision for Segments 1 and 2. Capstone will be the control phase in 2009. In Segment 1 (FY07-13), SBS is baselined to Achieve IOC at five key service delivery points Integrate ADS-B into 4 ATC automation systems Collect data for the certification of separation standards Achieve official operational status in 2010 Publish a proposed ADS-B final rule that would mandate ADS FY07 and FY08 activities include Develop Integrated Concept of Operations(CONOPS) Award SBS Service Provider Contract Finalize Backup Strategy Publish ADS-B "Out" Notice of Proposed Rulemaking Maintain BSS on the East Coast Maintain and Expand Alaska infrastructure Modeling for Separation Standards Joint Acceptance Inspection in the Gulf Standards development for ADS-B applications FY09 includes Complete Separation Standards reports for key service deliv Publish Final ADS-B Rules in Federal Register NAS-wide SBS Deployment Segment 2(FY09-16) includes Proliferation of aircraft application development NAS-wide SBS Deployment Integrate 9 surface surveillance systems with SBS.	erry points
9. Did the Agency's Executive/Investment Committee approve this request?	Yes
a. If "yes," what was the date of this approval?	8/27/2007
10. Did the Project Manager review this Exhibit?	Yes

Capezzuto, Vincent

Phone Number	Redacted
Email	vincent.capezzuto@faa.gov
a. What is the current FAC-P/PM certification level of the project/program manager?	TBD
12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project?	Yes
a. Will this investment include electronic assets (including computers)?	Yes
b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)	No
1. If "yes," is an ESPC or UESC being used to help fund this investment?	
2. If "yes," will this investment meet sustainable design principles?	
3. If "yes," is it designed to be 30% more energy efficient than relevant code?	
13. Does this investment directly support one of the PMA initiatives?	No
If "yes," check all that apply:	
a. 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?)	
14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit www.whitehouse.gov/omb/part.)	Yes
a. If "yes," does this investment address a weakness found during a PART review?	Yes
b. If "yes," what is the name of the PARTed program?	FAA Air Traffic Services
c. If "yes," what rating did the PART receive?	Adequate
15. Is this investment for information technology?	Yes
If the answer to Question 15 is "Yes," complete questions 16 16-23.	5-23 below. If the answer is "No," do not answer questions
For information technology investments only:	
16. What is the level of the IT Project? (per CIO Council PM Guidance)	Level 3
17. 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
18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4 - FY 2007 agency high risk report (per OMB Memorandum M-05-23)	Yes
19. Is this a financial management system?	No
a. If "yes," does this investment address a FFMIA compliance area?	
1. If "yes," which compliance area:	
2. If "no," what does it address?	
b. If "yes," please identify the system name(s) and systems inventory update required by Circular A-11 section	em acronym(s) as reported in the most recent financial 52

20. What is the percentage breakout for the total FY2009 funding request for the following? (This should total 100%)

Hardware	5.000000
Software	27.000000
Services	50.000000
Other	18.000000
21. If this project produces information dissemination	Yes

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?

22. Contact information of individual responsible for privacy related questions:

Name	Mauney, Carla
Phone Number	Redacted
Title	Privacy Officer
E-mail	carla.mauney@faa.gov
23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? Question 24 must be answered by all Investments:	Yes

24. Does this investment directly support one of the GAO Yes High Risk Areas?

## Section B: Summary of Spending (All Capital Assets)

1. 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.

Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES           (REPORTED IN MILLIONS)           (Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)													
	PY-1 and earlier	PY 2007	CY 2008	BY 2009	BY+1 2010	BY+2 2011	BY+3 2012	BY+4 and beyond	Total				
Planning:	9.9	0	0	0	Redacted	Redacted	Redacted	Redacted	Redacted				
Acquisition:	0	95	109.3	300.4	Redacted	Redacted	Redacted	Redacted	Redacted				
Subtotal Planning & Acquisition:	9.9	95	109.3	300.4	Redacted	Redacted	Redacted	Redacted	Redacted				
Operations & Maintenance:	0	1.592	1.849	2.938	Redacted	Redacted	Redacted	Redacted	Redacted				
TOTAL:	9.9	96.592	111.149	303.338	Redacted	Redacted	Redacted	Redacted	Redacted				
Government FTE Costs should not be included in the amounts provided above.													
Government FTE Costs	0.489	7.066	9.202	7.577	Redacted	Redacted	Redacted	Redacted	Redacted				
Number of FTE represented by Costs:	4	49	61	48	Redacted	Redacted	Redacted	Redacted	Redacted				

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.

2. Will this project require the agency to hire additional Yes FTE's?

a. If "yes," How many and in what year?

3 FTEs in FY2008, 2 FTEs in FY2009, 2 FTEs in Fy2010, 1 FTE in 2011, 1 FTE in 2012, 1 FTE in 2013, 1 FTE in 2014.

3. If the summary of spending has changed from the FY2008 President's budget request, briefly explain those changes: Redacted

## Section C: Acquisition/Contract Strategy (All Capital Assets)

1. Complete the table for all (including all non-Federal) contracts and/or task orders currently in place or planned for this investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

Contracts/T	ntracts/Task Orders Table: * Costs in millions															
Contract or Task Order Number	Type of Contract/ Task Order	Has the contract been awarded (Y/N)	If so what is the date of the award? If not, what is the planned award date?	Start date of Contract/ Task Order	End date of Contract/ Task Order	Total Value of Contract/ Task Order (\$M)	Is this an Interagenc y Acquisition ? (Y/N)	Is it performanc e based? (Y/N)	Competitive ly awarded? (Y/N)	What, if any, alternative financing option is being used? (ESPC, UESC, EUL, N/A)	Is EVM in the contract? (Y/N)	Does the contract include the required security & privacy clauses? (Y/N)	Name of CO	CO Contact information (phone/em ail)	Contracting Officer Certificatio n Level (Level 1,2,3,N/A)	If N/A, has the agency determined the CO assigned has the competenci es and skills necessary to support this acquisition ? (Y/N)
Redacted																

Exhibit 300: FAAXX704: Automatic Dependent Surveilance-Broadcast (ADS-B), of the Surveillance and Broadcast Services Program Redacted 1-25-5008

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

The contracts table was updated to delete completed contracts and add contracts that are for Capstone related work as well as Service provider contract specifics not previously available. The achievement of cost, schedule, and performance goals will be tracked and monitored through FAA best practices and established EVM processes defined by the FAA. Monthly program reviews, detailed schedule and EVM reporting will be applied in accordance with the FAA EVM Policy. Future contract(s) will include all EVM requirements established by the FAA and will be compliant with ANSI-EIA-748A standards, and the OMB A-11 guidance. Monthly program reviews, detailed schedule and EVM reporting will be included in all new contracts that are awarded as a part of this acquisition. Monthly Control Account Manager Reviews with the program management team will be conducted to ensure that the program is monitoring program performance measures and using all tools necessary to make the appropriate decisions with regards to technical scope, cost and schedule to allow the program to remain on track for program execution in accordance with is approved baselines.

In the FAA EVM is being performed on Government and Contractor costs. O&M and current support contracts will not require EVM but the support contractors are required to provide data that the SBS program office can perform EVM calculations on. Additionally, as shown on the table, some contracts are below the \$10 Million FAA threshold for requiring EVM in contracts.

For contracts that don't include a requirement to provide EVM; the program office will receive reports, required by those contracts, on actual costs, schedules and management metrics by charge number and work package. The program office will collect the data and enter it into their EVM database for reporting purposes, according to FAA standards. To the extent possible, future contracts will be performance based, require EVM (where applicable), be competitively awarded, and firm fix priced.

The SBS EVM System is in development. Many of the processes such as change management, work authorization and schedule maintenance are in place and operational. The program structure has been developed and loaded into the EV engine. The actuals data collection process has been identified and is being developed. The program has developed a POA&M and is working with the FAA EVM assessment team to ensure ANSI/EIA Standard - 748 compliance before 2008.

3. Do the contracts ensure Section 508 compliance?	N/A
a. Explain why:	The air traffic controllers must meet strict medical qualifications under OPM Qualification Standards, GS-2152, Air Traffic Control Series, as stated in FAA Order 3930.3A, Air Traffic Control Specialist Health Program. The GS-2152 require controllers to meet strict qualifications with respect to vision, hearing and other physical abilities that preclude the need for application of the 508 standards described at 1194 for this equipment.
4. Is there an acquisition plan which has been approved in accordance with agency requirements?	Yes
a. If "yes," what is the date?	8/17/2007
b. If "no," will an acquisition plan be developed?	
1. If "no," briefly explain why:	

## Section D: Performance Information (All Capital Assets)

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 or qualitative 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 FY 2009.

Performance In	erformance Information Table													
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results						
2006	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	Develop and Validate performance baseline and metrics for Segment 1	Develop and Validate Baseline. Starting BY07	Percent Improvement being developed. Starting BY07	06/2007						
2006	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Develop and Validate	Develop and Validate	Percent Improvement	06/2007						

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Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					performance baseline and metrics for Segment 1	Baseline. Starting BY07	being developed. Starting BY07	
2006	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Develop and Validate performance baseline and metrics for Segment 1	Develop and Validate Baseline. Starting BY07	Percent Improvement being developed. Starting BY07	06/2007
2006	Reduced Congestion	Technology	Efficiency	Accessibility	Develop and Validate performance baseline and metrics for Segment 1	Develop and Validate Baseline. Starting BY07	Percent Improvement being developed. Starting BY07	06/2007
2006	Reduced Congestion	Technology	Information and Data	Data Reliability and Quality	Develop and Validate performance baseline and metrics for Segment 1	Develop and Validate Baseline. Starting BY07	Percent Improvement being developed. Starting BY07	06/2007
2006	Reduced Congestion	Technology	Reliability and Availability	Availability	Develop and Validate performance baseline and metrics for Segment 1	Develop and Validate Baseline. Starting BY07	Percent Improvement being developed. Starting BY07	06/2007
2007	Safety	Customer Results	Customer Benefit	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	Projected to be \$998.35 M based on prototype system coverage to be replaced by National System Coverage in FY09.	Minimal improvement because of little equipage (+/- tolerance band that converges on measure over time)	6/2009 because of lag in NTSB data
2007	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	Alaska "CAPSTONE" Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft	Projected to be \$142.81 M	\$6.2 M in savings	6/2009 because of lag in NTSB data
2007	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated annual savings of 33 hrs.	6/2013
2007	Safety	Mission and Business Results	Transportation	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft	7.3 CFIT accidents, 5.7 Weather-related accidents, and 2.6x10^-10 Mid- air collisions per million operations	CFIT accidents down 17%, weather-related accidents down 26%, and Mid air collisions down 71% for equipped GA and Air Taxi aircraft multi-function display in coverage area when TIS-B service available Actual totals to show incremental improvement.	6/2009 because of lag in NTSB Data
2007	Safety	Mission and Business Results	Transportation	Air Transportation	Alaska "CAPSTONE" Aviation Accident Rate for	63 accidents per per million operations	13% reduction in accident rate for equipped aircraft with	6/2009 because of lag in NTSB Data

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Performance In	formation Table		1	¢	•	1	-	
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					equipped aircraft		multi-function display in coverage area when FIS-B service available (+/- tolerance band that converges on measure over time) Actual totals to show incremental improvement.	
2007	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: FIS-B latency	No Transmission, based on prototype system coverage to be replaced by National System Coverage in FY09.	FIS-B latency < 10 sec per message (Time from receipt of external data to message transmission) (+/- tolerance band that converges on measure over time)	1/2008
2007	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: TIS-B latency	No Transmission, based on prototype system coverage to be replaced by National System Coverage in FY09.	TIS-B latency <= 6.0 sec (Time of measurement of source position data to aircraft display) (+/- tolerance band that converges on measure over time)	1/2008
2007	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-R latency	No ADS-R, based on prototype system coverage to be replaced by National System Coverage in FY09.	ADS-R latency <= 3.0 sec (Time of ADS-R message applicability until display on aircraft) (+/- tolerance band that converges on measure over time)	1/2008
2007	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-B latency	No ADS-B, based on prototype system coverage to be replaced by National System Coverage in FY09.	End-to-end ADS- B surveillance latency <= 2.7 seconds for terminal operations, <= 3.3 seconds for en route operations. (+/- tolerance band that converges on measure over time)	1/2008
2007	Safety	Processes and Activities	Productivity and Efficiency	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	TBD – 9/07 See and avoid	TBD â€" TIS- B/ADS-B (+/- tolerance band that converges on measure over time)	1/2008
2007		Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire weather information. Technical Performance Measures modeling results for 2007/2008 will further define additional	TBD-9/08 average time of data through current process	TBD % access FIS-B (+/- tolerance band that converges on measure over time)	1/2009

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Performance Information Table									
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	
					TPMs for future years.				
2007	Reduced Congestion	Technology	Efficiency	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas	Coverage area contains 22% of NAS-wide GA Operations, based on prototype system coverage to be replaced by National System Coverage in FY09.	Coverage area contains 24% of NAS-wide GA Operations (+/- tolerance band that converges on measure over time)	1/2008	
2007	Safety	Technology	Efficiency	Accessibility	Percent of Alaska "CAPSTONE" operations inside FIS-B coverage areas	Coverage area contains 42% of Alaska Operations, based on current system coverage to be replaced by National System Coverage in FY09.	No change	1/2008	
2007	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: Percent of FIS-B service availability	Does not exist, based on prototype system coverage to be replaced by National System Coverage in FY09.	FIS-B service availability >= 99.9% (+/- tolerance band that converges on measure over time)	1/2008	
2007	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: Percent of TIS-B service availability	No TIS-B Availability, based on prototype system coverage to be replaced by National System	TIS-B service availability >= 99.9% (+/- tolerance band that converges on measure over time)	1/2008	
2007	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No ADS-R, based on prototype system coverage to be replaced by National System Coverage in FY09.	ADS-R service availability >= 99.9% (+/- tolerance band that converges on measure over time)	1/2008	
2008	Safety	Customer Results	Customer Benefit	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	Projected to be \$1012 M based on prototype system coverage to be replaced by National System Coverage in FY09.	\$570 K in savings	6/2010 because of lag in NTSB data	
2008	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft	Projected to be \$143.45 M	\$9.16 M in savings	6/2010 because of lag in NTSB data	
2008	Safety	Mission and Business Results	Transportation	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft	7.3 CFIT accidents, 5.7 Weather-related accidents, and 2.6x10^-10 Mid- air collisions per million operations based on prototype system coverage to be replaced by National System	CFIT accidents down 17%, weather-related accidents down 26%, and Mid air collisions down 71% for equipped GA and Air Taxi aircraft multi-function display in coverage area when TIS-B	6/2010 because of lag in NTSB Data	

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Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
						Coverage in FY09.	service available Actual totals to show incremental improvement.	
2008	Safety	Mission and Business Results	Transportation	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft	63 accidents per per million operations (1990-2004)	13% reduction in accident rate for equipped aircraft with multi-function display in coverage area when F1S-B service available (+/- tolerance band that converges on measure over time) Actual totals to show incremental improvement.	6/2010 because of lag in NTSB Data
2008	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: FIS-B latency	No Transmission, based on prototype system coverage to be replaced by National System Coverage in FY09.	FIS-B latency < 10 sec per message (Time from receipt of external data to message transmission) (+/- tolerance band that converges on measure over time)	1/2009
2008	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: TIS-B latency	No Transmission, based on prototype system coverage to be replaced by National System Coverage in FY09.	TIS-B latency <= 6.0 sec (Time of measurement of source position data to aircraft display) (+/- tolerance band that converges on measure over time)	1/2009
2008	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-R latency	No ASD-R, based on prototype system coverage to be replaced by National System Coverage in FY09.	ADS-R latency <= 3.0 sec (Time of ADS-R message applicability until display on aircraft) (+/- tolerance band that converges on measure over time)	1/2009
2008	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-B latency	No ADS-B, based on prototype system coverage to be replaced by National System Coverage in FY09.	End-to-end ADS- B surveillance latency <= 2.7 seconds for terminal operations, <= 3.3 seconds for en route operations. (+/- tolerance band that converges on measure over time)	1/2009
2008	Reduced Congestion	Processes and Activities	Productivity and Efficiency	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.	TBD - 9/08 See and avoid	TBD % TIS- B/ADS-B (+/- tolerance band that converges on measure over time)	1/2010

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Performance In	formation Table							
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Congestion	Activities	Efficiency		to acquire weather information. Technical Performance Measures modeling results for 2007/2008 will further define additional TPMs for future years.	average time of data through current process	FIS-B (+/- tolerance band that converges on measure over time)	
2008	Reduced Congestion	Technology	Efficiency	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas	Coverage area contains 22% of NAS-wide GA Operations, based on prototype system coverage to be replaced by National System Coverage in FY09.	Coverage area contains 24% of NAS-wide GA Operations (+/- tolerance band that converges on measure over time)	1/2009
2008	Safety	Technology	Efficiency	Accessibility	Coverage area contains 42% of Alaska Operations, based on current system coverage to be replaced by National System Coverage in FY09.	Coverage area contains 42% of Alaska Operations, based on current system coverage to be replaced by National System Coverage in FY09.	Coverage area contains 79% of Alaska Operations	1/2009
2008	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: Percent of FIS-B service availability	Does not exist, based on prototype system coverage to be replaced by National System Coverage in FY09.	FIS-B service availability >= 99.9% (+/- tolerance band that converges on measure over time)	1/2009
2008	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: Percent of TIS-B service availability	No TIS-B Availability, based on prototype system coverage to be replaced by National System Coverage in FY09.	TIS-B service availability >= 99.9% (+/- tolerance band that converges on measure over time)	1/2009
2008	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No ADS-R, based on prototype system coverage to be replaced by National System Coverage in FY09.	ADS-R service availability >= 99.9% (+/- tolerance band that converges on measure over time)	1/2009
2009	Safety	Customer Results	Customer Benefit	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	Projected to be \$1026.49 M based on prototype system coverage to be replaced by National System Coverage in FY09.	\$1.00 M in savings	6/2011 because of lag in NTSB Data
2009	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft	Projected to be \$144.10 M	\$13.41 M in savings	6/2011 because of lag in NTSB Data
2009	Safety	Mission and	Transportation	Air	CONUS CFIT,	7.3 CFIT	CFIT accidents	6/2011 because

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Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
		Business Results		Transportation	Weather Related and Mid-Air Collision Rates for equipped GA aircraft	accidents, 5.7 Weather-related accidents, and 2.6x10^-10 Mid- air collisions per million operations based on prototype system coverage to be replaced by National System Coverage in FY09.	down 17%, weather-related accidents down 26%, and Mid air collisions down 71% for equipped GA and Air Taxi aircraft multi-function display in coverage area when TIS-B service available Actual totals to show incremental improvement.	of lag in NTSB Data
2009	Safety	Mission and Business Results	Transportation	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft	63 accidents per per million operations (1990-2004)	13% reduction in accident rate for equipped aircraft with multi-function display in coverage area when FIS-B service available (+/- tolerance band that converges on measure over time) Actual totals to show incremental improvement.	6/2011 because of lag in NTSB Data
2009	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated savings of 20 hrs. Actual totals will be reported showing incremental improvement.	6/2010
2009	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: FIS-B latency	No Transmission	FIS-B latency < 10 sec per message (Time from receipt of external data to message transmission)	1/2010
2009	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: TIS-B latency	No Transmission	TIS-B latency <= 6.0 sec (Time of measurement of source position data to aircraft display)	1/2010
2009	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-R latency	No ADS-R	ADS-R latency <= 3.0 sec (Time of ADS-R message applicability until display on aircraft)	1/2010
2009	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-B latency	No ADS-B	End-to-end ADS- B surveillance latency <= 2.7 seconds for terminal operations, <= 3.3 seconds for en route operations.	1/2010
2009	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire proximate traffic	TBD - 9/08 See and avoid	TBD % TIS- B/ADS-B	1/2010

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Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Supported				information.			
2009	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire weather information	TBD-9/08 average time of data through current process	TBD % access FIS-B	1/2010
2009	Reduced Congestion	Technology	Efficiency	Accessibility	Expansion of Broadcast Services: Percent of GA NAS-wide operations inside FIS-B and TIS-B coverage areas	Coverage area contains 24% of NAS-wide GA Operations	Coverage area contains 59% of NAS-wide GA Operations	1/2010
2009	Safety	Technology	Efficiency	Accessibility	Percent of Alaska operations inside FIS-B coverage areas	Coverage area contains 79% of Alaska Operations, based on current system coverage to be replaced by National System Coverage in FY09.	Coverage area contains 84% of Alaska Operations	1/2010
2009	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: FIS-B service availability	Does not exist	FIS-B service availability >= 99.9%	1/2010
2009	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: TIS-B service availability	No TIS-B Availability	TIS-B service availability >= 99.9%	1/2010
2009		Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No ADS-R	ADS-R service availability >= 99.9%	1/2010
2010	Safety	Customer Results	Customer Benefit	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	Projected to be \$1040.96 M based on prototype system coverage to be replaced by National System Coverage in FY09.	\$3.41 M in savings	6/2012 because of lag in NTSB Data
2010	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft	Projected to be \$144.76 M	\$17.83 M in savings	6/2012 because of lag in NTSB Data
2010	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	Gulf of Mexico, Low-altitude: Average passenger delay of IFR flights in low-altitude sector during IMC conditions	Estimated Baseline passenger delay of 11,538 hrs	Reduction of passenger delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2011
2010	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated annual savings of 33 hrs.	6/2011
2010	Safety	Mission and Business Results	Transportation	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Pates	7.3 CFIT accidents, 5.7 Weather-related	CFIT accidents down 17%, weather-related	6/2012 because of lag in NTSB Data

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Performance Ir	erformance Information Table									
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results		
					for equipped GA aircraft	2.6x10^-10 Mid- air collisions per million operations based on prototype system coverage to be replaced by National System Coverage in FY09.	26%, and Mid air collisions down 71% for equipped GA and Air Taxi aircraft multi-function display in coverage area when TIS-B service available Actual totals to show incremental improvement.			
2010	Safety	Mission and Business Results	Transportation	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft	63 accidents per per million operations (1990-2004)	13% reduction in accident rate for equipped aircraft with multi-function display in coverage area when FIS-B service available (+/- tolerance band that converges on measure over time) Actual totals to show incremental improvement.	6/2012 because of lag in NTSB Data		
2010	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Gulf of Mexico, Low-altitude: Average block delay of IFR flights in Iow- altitude sector during IMC conditions	Estimated Baseline delay of 11,538 hrs	Reduction of delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2011		
2010	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated savings of 20 hrs.	6/2011		
2010	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: FIS-B latency	No Transmission	FIS-B latency < 10 sec per message (Time from receipt of external data to message transmission)	1/2011		
2010	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: TIS-B latency	No Transmission	TIS-B latency <= 6.0 sec (Time of measurement of source position data to aircraft display)	1/2011		
2010	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-R Latency	No Transmission	ADS-R latency <= 3.0 sec (Time of ADS-R message applicability until display on aircraft)	1/2011		
2010	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency	No Transmission	End-to-end ADS- B surveillance latency <= 2.7 seconds for terminal operations, <= 3.3 seconds for en route operations.	1/2011		
2010	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	CDTI carrier	No Transmission	Terminal ATC	1/2011		

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Fiscal Year	Strategic Goal(s)	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Supported				Gulf of Mexico â€" Low & high altitude: Terminal ATC surveillance application latency		application latency <= 2.7 sec (time of applicability of ADS-B Message data until display by ATC Automation)	
2010	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire proximate traffic information.	TBD - 9/08 See and avoid	TBD % TIS- B/ADS-B	1/2011
2010	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire weather information	TBD-9/08 average time of data through current process	TBD % access FIS-B	1/2011
2010	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions	2006-2008 Baseline peak arrival rate during marginal visual meteorological conditions	75% reduction in difference between peak arrival rates during MVMC and VMC conditions.	6/2011
2010	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Gulf of Mexico, Low-altitude: IFR capacity of low-altitude sector after improved services (communications , weather, surveillance)	Instantaneous capacity of 10 aircraft	Instantaneous capacity of 15 aircraft after communications, weather installation	1/2011
2010	Safety	Technology	Reliability and Availability	Availability	Gulf of Mexico, Low-altitude: Availability of upgraded communications and weather stations in low- altitude Gulf of Mexico sector	No Communications and Weather	Upgraded communications and weather station availability >= 99.9%	1/2011
2010	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: FIS-B service availability	No FIS-B	FIS-B service availability >= 99.9%	1/2011
2010	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: TIS-B service availability	No TIS-B	TIS-B service availability >= 99.9%	1/2011
2010	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No ADS-R Availability	ADS-R service availability >= 99.9%	1/2011
2010	Reduced Congestion	Technology	Reliability and Availability	Availability	CDTI carrier operations & Gulf of Mexico â€" Low & high altitude: ADS-B service availability	No ADS-B	ADS-B service availability >= 99.999% (Includes total outage time for navigation source, back up surveillance source, broadcast services infrastructure, and automation system)	1/2011
2011	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	CONUS, HI and Caribbean Controlled Flight into Terrain, Weather-related, and Mid-air Accident Costs from fatalities	Projected to be \$1055.98 M based on prototype system coverage to be replaced by National System	\$4.71 M in savings	6/2013 because of lag in NTSB Data

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Performance Ir	Performance Information Table									
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results		
					injuries, and aircraft damage for equipped aircraft	Coverage in FY09.				
2011	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft	Projected to be \$145.41 M	\$22.58 M in savings	6/2013 because of lag in NTSB Data		
2011	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	Gulf of Mexico, Low-altitude: Average passenger delay of IFR flights in low-altitude sector during IMC conditions	Estimated Baseline passenger delay of 11,538 hrs	Reduction of passenger delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2012		
2011	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated annual savings of 33 hrs.	6/2012		
2011	Safety	Mission and Business Results	Transportation	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft	7.3 CFIT accidents, 5.7 Weather-related accidents, and 2.6x10^-10 Mid- air collisions per million operations based on prototype system coverage to be replaced by National System Coverage in FY09.	CFIT accidents down 17%, weather-related accidents down 26%, and Mid air collisions down 71% for equipped GA and Air Taxi aircraft multi-function display in coverage area when TIS-B service available Actual totals to show incremental improvement.	6/2013 because of lag in NTSB Data		
2011	Safety	Mission and Business Results	Transportation	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft	63 accidents per per million operations (1990-2004)	13% reduction in accident rate for equipped aircraft with multi-function display in coverage area when FIS-B service available (+/- tolerance band that converges on measure over time) Actual totals to show incremental improvement.	6/2013 because of lag in NTSB Data		
2011	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Gulf of Mexico, Low-altitude: Average block delay of IFR flights in Iow- altitude sector during IMC conditions	Estimated Baseline delay of 11,538 hrs	Reduction of delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2012		
2011	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft.	6/2012		

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Performance I	erformance Information Table									
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results		
					conditions		Estimated savings of 20 hrs.			
2011	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: FIS-B latency	No Transmission	FIS-B latency < 10 sec per message (Time from receipt of external data to message transmission)	1/2012		
2011	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: TIS-B latency	No Transmission	TIS-B latency <= 6.0 sec (Time of measurement of source position data to aircraft display)	1/2012		
2011	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-R Latency	No Transmission	ADS-R latency <= 3.0 sec (Time of ADS-R message applicability until display on aircraft)	1/2012		
2011	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency	No Transmission	End-to-end ADS- B surveillance latency <= 2.7 seconds for terminal operations, <= 3.3 seconds for en route operations.	1/2012		
2011	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	CDTI carrier operations & Gulf of Mexico à€" Low & high altitude: Terminal ATC surveillance application latency	No Transmission	Terminal ATC surveillance application latency <= 2.7 sec (time of applicability of ADS-B Message data until display by ATC Automation)	1/2012		
2011	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire proximate traffic information.	TBD - 9/08 See and avoid	TBD % TIS- B/ADS-B	1/2012		
2011	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire weather information	TBD-9/08 average time of data through current process	TBD % access FIS-B	1/2012		
2011	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions	2006-2008 Baseline peak arrival rate during marginal visual meteorological conditions	75% reduction in difference between peak arrival rates during MVMC and VMC conditions.	6/2012		
2011	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Gulf of Mexico, Low-altitude: IFR capacity of low-altitude sector after improved services (communications , weather, surveillance)	Instantaneous capacity of 10 aircraft	Instantaneous capacity of 15 aircraft after communications, weather installation	1/2012		
2011	Safety	Technology	Reliability and Availability	Availability	Gulf of Mexico, Low-altitude: Availability of upgraded communications and weather stations in low- altitude Gulf of Mexico sector	No Communications and Weather	Upgraded communications and weather station availability >= 99.9%	1/2012		
2011	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast	No FIS-B	FIS-B service availability >=	1/2012		

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Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Supporteu				Services: FIS-B service availability		99.9%	
2011	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: TIS-B service availability	No TIS-B	TIS-B service availability >= 99.9%	1/2012
2011	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No ADS-R Availability	ADS-R service availability >= 99.9%	1/2012
2011	Reduced Congestion	Technology	Reliability and Availability	Availability	CDTI carrier operations & Gulf of Mexico à€" Low & high altitude: ADS-B service availability	No ADS-B	ADS-B service availability >= 99.999% (Includes total outage time for navigation source, back up surveillance source, broadcast services infrastructure, and automation system)	1/2012
2012	Safety	Customer Results	Customer Benefit	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	Projected to be \$1071.25 M based on prototype system coverage to be replaced by National System Coverage in FY09.	\$7.95 M in savings	6/2014 because of lag in NTSB Data
2012	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	Alaska Aviation Accident Costs from fatalities, injuries, and aircraft damage for equipped aircraft	Projected to be \$146.17 M	\$27.39 M in savings	6/2014 because of lag in NTSB Data
2012	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	Gulf of Mexico, Low-altitude: Average passenger delay of IFR flights in low-altitude sector during IMC conditions	Estimated Baseline passenger delay of 11,538 hrs	Reduction of passenger delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2013
2012	Reduced Congestion	Customer Results	Customer Benefit	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated annual savings of 33 hrs.	6/2013
2012	Safety	Mission and Business Results	Transportation	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft	7.3 CFIT accidents, 5.7 Weather-related accidents, and 2.6x10^-10 Mid- air collisions per million operations based on prototype system coverage to be replaced by National System Coverage in FY09.	CFIT accidents down 17%, weather-related accidents down 26%, and Mid air collisions down 71% for equipped GA and Air Taxi aircraft multi-function display in coverage area when TIS-B service available Actual totals to show incremental	6/2014 because of lag in NTSB Data

Performance In	formation Table	÷ •	-			1	-	
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
		1	1				improvement.	
2012	Safety	Mission and Business Results	Transportation	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft	63 accidents per per million operations (1990-2004)	13% reduction in accident rate for equipped aircraft with multi-function display in coverage area when FIS-B service available (+/- tolerance band that converges on measure over time) Actual totals to show incremental improvement.	6/2014 because of lag in NTSB Data
2012	Reduced Congestion	Mission and Business Results	Iransportation	Air Transportation	Guif of Mexico, Low-altitude: Average block delay of IFR flights in Iow- altitude sector during IMC conditions	Estimated Baseline delay of 11,538 hrs	Reduction of delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2013
2012	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated savings of 20 hrs.	6/2013
2012	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: FIS-B latency	No Transmission	FIS-B latency < 10 sec per message (Time from receipt of external data to message transmission)	1/2013
2012	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: TIS-B latency	No Transmission	TIS-B latency <= 6.0 sec (Time of measurement of source position data to aircraft display)	1/2013
2012	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-R Latency	No Transmission	ADS-R latency <= 3.0 sec (Time of ADS-R message applicability until display on aircraft)	1/2013
2012	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency	No Transmission	End-to-end ADS- B surveillance latency <= 2.7 seconds for terminal operations, <= 3.3 seconds for en route operations.	1/2013
2012	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	CDTI carrier operations & Gulf of Mexico à€" Low & high altitude: Terminal ATC surveillance application latency	No Transmission	Terminal ATC surveillance application latency <= 2.7 sec (time of applicability of ADS-B Message data until display by ATC Automation)	1/2013
2012	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire proximate traffic	TBD - 9/08 See and avoid	TBD % TIS- B/ADS-B	1/2013

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Performance Ir	erformance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	
2012	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire weather information	TBD-9/08 average time of data through current process	TBD % access FIS-B	1/2013	
2012	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions	2006-2008 Baseline peak arrival rate during marginal visual meteorological conditions	75% reduction in difference between peak arrival rates during MVMC and VMC conditions.	6/2013	
2012	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Gulf of Mexico, Low-altitude: IFR capacity of low-altitude sector after improved services (communications , weather, surveillance)	Instantaneous capacity of 10 aircraft	Instantaneous capacity of 15 aircraft after communications, weather installation	1/2013	
2012	Safety	Technology	Reliability and Availability	Availability	Gulf of Mexico, Low-altitude: Availability of upgraded communications and weather stations in low- altitude Gulf of Mexico sector	No Communications and Weather	Upgraded communications and weather station availability >= 99.9%	1/2013	
2012	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: FIS-B service availability	No FIS-B	FIS-B service availability >= 99.9%	1/2013	
2012	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No TIS-B Availability	TIS-B service availability >= 99.9%	1/2013	
2012	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No TIS-B Availability	ADS-R service availability >= 99.9%	1/2013	
2012	Reduced Congestion	Technology	Reliability and Availability	Availability	CDTI carrier operations & Gulf of Mexico à€" Low & high altitude: ADS-B service availability	No ADS-B	ADS-B service availability >= 99.999% (Includes total outage time for navigation source, back up surveillance source, broadcast services infrastructure, and automation system)	1/2013	
2013	Safety	Customer Results	Customer Benefit	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	Projected to be \$1086.98 M based on prototype system coverage to be replaced by National System Coverage in FY09.	\$12.30 M in savings	6/2014 because of lag in NTSB Data	
2013	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	Gulf of Mexico, Low-altitude: Average passenger delay of IFR flights in low-altitude sector during IMC conditions	Estimated Baseline passenger delay of 11,538 hrs	Reduction of passenger delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2014	

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Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
2013	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated annual savings of 33 hrs.	6/2014
2013	Safety	Mission and Business Results	Transportation	Air Transportation	CONUS CFIT, Weather Related and Mid-Air Collision Rates for equipped GA aircraft	7.3 CFIT accidents, 5.7 Weather-related accidents, and 2.6x10^-10 Mid- air collisions per million operations based on prototype system coverage to be replaced by National System Coverage in FY09.	CFIT accidents down 17%, weather-related accidents down 26%, and Mid air collisions down 71% for equipped GA and Air Taxi aircraft multi-function display in coverage area when TIS-B service available Actual totals to show incremental improvement.	6/2015 because of lag in NTSB Data
2013	Safety	Mission and Business Results	Transportation	Air Transportation	Alaska Aviation Accident Rate for equipped aircraft	63 accidents per per million operations (1990-2004)	13% reduction in accident rate for equipped aircraft with multi-function display in coverage area when FIS-B service available (+/- tolerance band that converges on measure over time) Actual totals to show incremental improvement.	6/2015 because of lag in NTSB Data
2013	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Gulf of Mexico, Low-altitude: Average block delay of IFR flights in Iow- altitude sector during IMC conditions	Estimated Baseline delay of 11,538 hrs	Reduction of delay hrs by 28% or 3110 hrs a year after communications and weather installation	6/2014
2013	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	CDTI carrier operations: Airborne delay of equipped flights at Louisville International Airport during marginal visual instrument conditions	2006-2008 baseline airborne delay for equipped arrivals into Louisville during marginal visual conditions	75% reduction in difference between airborne delay during MVMC and VMC conditions for equipped aircraft. Estimated savings of 20 hrs.	6/2014
2013	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: FIS-B latency	No Transmission	FIS-B latency < 10 sec per message (Time from receipt of external data to message transmission)	1/2014
2013	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: TIS-B latency	No Transmission	TIS-B latency <= 6.0 sec (Time of measurement of source position data to aircraft display)	1/2014
2013	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast	No Transmission	ADS-R latency <= 3.0 sec	1/2014

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Fiscal Year	Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					Services: ADS-R Latency		(Time of ADS-R message applicability until display on aircraft)	
2013	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	Expansion of Broadcast Services: ADS-B surveillance latency	No Transmission	End-to-end ADS- B surveillance latency <= 2.7 seconds for terminal operations, <=3.3 seconds for en route operations.	1/2014
2013	Reduced Congestion	Processes and Activities	Cycle Time and Resource Time	Cycle Time	CDTI carrier operations & Gulf of Mexico à€" Low & high altitude: Terminal ATC surveillance application latency	No Transmission	Terminal ATC surveillance application latency <= 2.7 sec (time of applicability of ADS-B Message data until display by ATC Automation)	1/2014
2013	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire proximate traffic information.	TBD - 9/08 See and avoid	TBD % TIS- B/ADS-B	1/2014
2013	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Time for aircrew to acquire weather information	TBD-9/08 average time of data through current process	TBD % access FIS-B	1/2014
2013	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	CDTI carrier applications: Effective capacity of Louisville International Airport during marginal visual instrument conditions	2006-2008 Baseline peak arrival rate during marginal visual meteorological conditions	75% reduction in difference between peak arrival rates during MVMC and VMC conditions.	6/2014
2013	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Gulf of Mexico, Low-altitude: IFR capacity of low-altitude sector after improved services (communications , weather, surveillance)	Instantaneous capacity of 10 aircraft	Instantaneous capacity of 15 aircraft after communications, weather installation	1/2014
2013	Safety	Technology	Reliability and Availability	Availability	Gulf of Mexico, Low-altitude: Availability of upgraded communications and weather stations in low- altitude Gulf of Mexico sector	No Communications and Weather	Upgraded communications and weather station availability >= 99.9%	1/2014
2013	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: FIS-B service availability	No FIS-B	FIS-B service availability >= 99.9%	1/2014
2013	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: TIS-B service availability	No TIS-B	TIS-B service availability >= 99.9%	1/2014
2013	Reduced Congestion	Technology	Reliability and Availability	Availability	Expansion of Broadcast Services: ADS-R service availability	No ADS-R Availability	ADS-R service availability >= 99.9%	1/2014
2013	Reduced Congestion	Technology	Reliability and Availability	Availability	CDTI carrier operations & Gulf of Mexico â€" Low & high altitude: ADS-B service	No ADS-B	ADS-B service availability >= 99.999% (Includes total outage time for navigation	1/2014

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Performance In	Performance Information Table							
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					availability		source, back up surveillance source, broadcast services infrastructure, and automation system)	

## Section E: Security and Privacy (IT Capital Assets only)

In order to successfully address this area of the business case, each question below must be answered at the system/application level, not at a program or agency level. Systems supporting this investment on the planning and operational systems security tables should match the systems on the privacy table below. Systems on the Operational Security Table must be included on your agency FISMA system inventory and should be easily referenced in the inventory (i.e., should use the same name or identifier).

For existing Mixed-Life Cycle investments where enhancement, development, and/or modernization is planned, include the investment in both the "Systems in Planning" table (Table 3) and the "Operational Systems" table (Table 4). Systems which are already operational, but have enhancement, development, and/or modernization activity, should be included in both Table 3 and Table 4. Table 3 should reflect the planned date for the system changes to be complete and operational, and the planned date for the associated C&A update. Table 4 should reflect the current status of the requirements listed. In this context, information contained within Table 3 should characterize what updates to testing and documentation will occur before implementing the enhancements; and Table 4 should characterize the current state of the materials associated with the existing system.

All systems listed in the two security tables should be identified in the privacy table. The list of systems in the "Name of System" column of the privacy table (Table 8) should match the systems listed in columns titled "Name of System" in the security tables (Tables 3 and 4). For the Privacy table, it is possible that there may not be a one-to-one ratio between the list of systems and the related privacy documents. For example, one PIA could cover multiple systems. If this is the case, a working link to the PIA may be listed in column (d) of the privacy table more than once (for each system covered by the PIA).

The questions asking whether there is a PIA which covers the system and whether a SORN is required for the system are discrete from the narrative fields. The narrative column provides an opportunity for free text explanation why a working link is not provided. For example, a SORN may be required for the system, but the system is not yet operational. In this circumstance, answer "yes" for column (e) and in the narrative in column (f), explain that because the system is not operational the SORN is not yet required to be published.

Please respond to the questions below and verify the system owner took the following actions:

1. Have the IT security costs for the system(s) been identified Yes and integrated into the overall costs of the investment:

a. If "yes," provide the "Percentage IT Security" for the 1.00 budget year:

2. Is identifying and assessing security and privacy risks a part Yes of the overall risk management effort for each system

supporting or part of this investment.

3. Systems in Planning and Undergoing Enhancement(s), Development, and/or Modernization - Security Table(s):							
Name of System		Agency/ or Contractor Operated System?		Planned Operational Date		Date of Planned C&A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)	
Redacted							
4. Operational Sys	stems - Security Ta	able:		•		•	
Name of System	Agency/ or Contractor Operated System?	NIST FIPS 199 Risk Impact level (High, Moderate, Low)	Has C&A been Completed, using NI ST 800-37? (Y/N)	Date Completed: C&A	What standards were used for the Security Controls tests? (FIPS 200/NIST 800-53, Other, N/A)	Date Complete(d): Security Control Testing	Date the contingency plan tested
Redacted							

5. Have any weaknesses, not yet remediated, related to any of Yes the systems part of or supporting this investment been identified by the agency or IG?

a. If "yes," have those weaknesses been incorporated into Yes the agency's plan of action and milestone process?

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6. Indicate whether an increase in IT security funding is Redacted requested to remediate IT security weaknesses?

a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness.

7. How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above? Redacted

8. Planning & Operational Systems - Privacy Table:						
(a) Name of System	(b) Is this a new system? (Y/N)	(c) Is there at least one Privacy Impact Assessment (PIA) which covers this system? (Y/N)	(d) Internet Link or Explanation	(e) Is a System of Records Notice (SORN) required for this system? (Y/N)	(f) Internet Link or Explanation	
AAL Capstone	No	No	The system does not contain, process, or transmit personal identifying information.	No	The system is not a Privacy Act system of records.	
Prototype: Broadcast Services System (Atlantic City Control Facility)	No	No	The system does not contain, process, or transmit personal identifying information.	No	The system is not a Privacy Act system of records.	
The system is not a Privacy Act system of records.	Yes	No	The system does not contain, process, or transmit personal identifying information.	No	The system is not a Privacy Act system of records.	

Details for Text Options:

Column (d): If yes to (c), provide the link(s) to the publicly posted PIA(s) with which this system is associated. If no to (c), provide an explanation why the PIA has not been publicly posted or why the PIA has not been conducted.

Column (f): If yes to (e), provide the link(s) to where the current and up to date SORN(s) is published in the federal register. If no to (e), provide an explanation why the SORN has not been published or why there isn't a current and up to date SORN.

Note: Working links must be provided to specific documents not general privacy websites. Non-working links will be considered as a blank field.

## Section F: Enterprise Architecture (EA) (IT Capital Assets only)

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.

 1. Is this investment included in your agency's target enterprise architecture?
 Yes

 a. If "no," please explain why?
 Yes

 2. Is this investment included in the agency's EA Transition Strategy?
 Yes

a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment.

b. If "no," please explain why?

3. Is this investment identified in a completed (contains a target architecture) and approved segment architecture?

Yes

Automatic Dependent Surveillance-Broadcast (ADS-B)

a. If "yes," provide the name of the segment architecture as Air Traffic provided in the agency's most recent annual EA Assessment.

4. Service Component Reference Model (SRM) Table: 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.								
Agency Component Name	Agency Component Name         Agency Component Description         FEA SRM Service Domain         FEA SRM Service Type         FEA SRM Component (a)         Service Component (b)         Service Component Reused UPI (b)         Internal or External Reuse? (c)         BY Funding Percentage (c)						BY Funding Percentage (d)	
Aircraft-to- Aircraft Separation (ATC-Separation Assurance):	Aircraft are separated from other known aircraft in the terminal, en	Business Analytical Services	Visualization	Mapping / Geospatial / Elevation / GPS			No Reuse	75

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4. Service Comp Identify the servi etc.). Provide this	ponent Referenc ice components fu s information in th	e Model (SRM) 1 nded by this majo ne format of the fo	Table: r IT investment (e llowing table. For	e.g., knowledge m detailed guidance	anagement, conte e regarding compo	nt management, nents, please refe	customer relations er to http://www.e	ship management, gov.gov.
Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
	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 defined for aircraft based on aircraft type, size, equipment, and for operating in different environments. (NAS ATC- Separation							
Aircraft-Terrain-	Assurance):	Business	Visualization	Mapping /			No Reuse	5
All call Ferrain- Obstacles (ATC- Separation Assurance)	Alitcrait 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, 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	Analytical Services		Geospatial / Elevation / GPS				5
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	Business Analytical Services	Visualization	Mapping / Geospatial / Elevation / GPS			No Reuse	10

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4 Somioo Com	onont Deference	o Model (SDM)	Filogiai	In Reddeled 1=2	23-3000			
4. Service component Reference Model (SMM) Table: 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.egoy.gov.								
Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
	surface include the number, type, position, and intent of the ground traffic. (NAS ATC- Advisory Services)							
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	Business Analytical Services	Visualization	Mapping / Geospatial / Elevation / GPS			No Reuse	10

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 the column can, but are not required to, add up to 100%.

5. Technical Reference Model (TRM) Table: 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.						
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	Redacted		
Mapping / Geospatial / Elevation / GPS	Component Framework	Presentation / Interface	Content Rendering	Redacted		
Mapping / Geospatial / Elevation / GPS	Service Access and Delivery	Access Channels	Other Electronic Channels	Redacted		
Mapping / Geospatial / Elevation / GPS	Service Interface and Integration	Interoperability	Data Transformation	Redacted		
Mapping / Geospatial / Elevation / GPS	Service Platform and Infrastructure	Database / Storage	Database	Redacted		
Mapping / Geospatial /	Service Platform and	Hardware / Infrastructure	Servers / Computers	Redacted		

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5. Technical Reference Model (TRM) Table: 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.						
FEA SRM Component (a) FEA TRM Service Area FEA TRM Service Category FEA TRM Service Standard (i.e., vendor and product name)						
Elevation / GPS	Infrastructure					
Mapping / Geospatial / Service Platform and Software Engineering Test Management Redacted Elevation / GPS Infrastructure						

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

No

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.

6. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)?

a. If "yes," please describe.

#### Exhibit 300: Part II: Planning, Acquisition and Performance Information

### Section A: Alternatives Analysis (All Capital Assets)

Part II should be completed only for investments identified as "Planning" or "Full Acquisition," or "Mixed Life-Cycle" investments in response to Question 6 in Part I, Section A above.

In selecting the best capital asset, you should identify and consider at least three viable alternatives, in addition to the current baseline, i.e., the status quo. Use OMB Circular A-94 for all investments and the Clinger Cohen Act of 1996 for IT investments to determine the criteria you should use in your Benefit/Cost Analysis.

1. Did you conduct an alternatives analysis for this project? Yes

a. If "yes," provide the date the analysis was completed? 8/27/2007

b. If "no," what is the anticipated date this analysis will be completed?

c. If no analysis is planned, please briefly explain why:

2. Alternative Analysis Results:	lysis to complete the following table.		* Costs in millions
Alternative Analyzed	Description of Alternative	Risk Adjusted Lifecycle Costs estimate	Risk Adjusted Lifecycle Benefits estimate
Redacted			

3. Which alternative was selected by the Agency's Executive/Investment Committee and why was it chosen?

Redacted

4. What specific qualitative benefits will be realized?

Redacted

5. Will the selected alternative replace a legacy system in-part Yes or in-whole?

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

Legacy Investment

b. If "yes," please provide the following information:

List of Legacy Investment or Systems						
Name of the Legacy Investment of Systems	UPI if available	Date of the System Retirement				
ASDE-3/AMASS		9/30/2020				
ASDE-X (SMR portion)	021-12-01-20-01-1040-00	9/30/2020				
ASR-11 (SSR portion)	021-12-01-20-01-1160-00	9/30/2024				
ATCBI-4/5		9/30/2024				
Mode-S (partial retirement)	021-12-01-20-02-3020-00	9/30/2024				

### Section B: Risk Management (All Capital Assets)

You should have performed a risk assessment during the early planning and initial concept phase of this investment's life-cycle, developed a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

1. Does the investment have a Risk Management Plan?	Yes
a. If "yes," what is the date of the plan?	5/10/2006
b. Has the Risk Management Plan been significantly	Yes

b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?

c. If "yes," describe any significant changes:

The Risk Management Plan (RMP) was developed as a part of the JRC2b process. The plan calls for, and the program team conducts, bi-weekly meetings of team task leads and subject matter experts to formally report on risk status, mitigation actions,

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and introduce any new risks into the register. Consistent risk updates ensure a thorough and accurate assessment of risks and their mitigation plans for the IBR.

2. If there currently is no plan, will a plan be developed?

- a. If "yes," what is the planned completion date?
- b. If "no," what is the strategy for managing the risks?

3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule:

RESULTS: Cost risk adjustments were made to Segment 1 and Segment 2 totaling \$141,491,600 and \$49,464,000 respectively. The program plans to align these costs at the control account level as part of the Earned Value Management development plan.

METHODOLOGY: The program implemented the approved Risk Management Plan which provides the framework for the assigned Risk Management Coordinator and designated Risk Board to implement the process for identifying, analyzing, mitigating and managing program risks. The risks were documented and assessed as to their likelihood, consequence and overall risk level in the program's risk register, and these assessments were input to the cost and schedule estimation processes. No PART weaknesses specific to SBS were identified therefore no ADS-B weaknesses to address.

For cost adjustments, the risks were "mapped" to elements in the program WBS based on information in the risk statements and mitigation plans which were used to determine areas in the estimate that may be impacted, and ranges for the triangular distribution (i.e., pessimistic, most likely, optimistic). A software

tool was used to perform a Monte Carlo simulation against the estimates,

and the results were included in the final submission. For schedule estimates, the risks were used to adjust the durations that were included in the program schedule using a similar approach (i.e., pessimistic, most likely and optimistic estimates). Management reserve is not tracked currently tracked as an individual milestone but will be identifiable within the control accounts in the coming months. Review of management reserve and planning for the disposition of reserve are included in biweekly risk meetings. Full cost estimates associated with risks and management reserve are a part of the program's Basis of Estimate approved by the FAA JRC on August 27, 2007. The ADS-B program is mitigating the fact that they are on the OMB High Risk list by briefing program status to OMB personnel on a quarterly basis, responding to OMB inquiries, and providing OMB Exhibit 300 packages annually.

Total FAA Costs (In Millions) Risk Adjusted: No Risk Adjustment:

## Section C: Cost and Schedule Performance (All Capital Assets)

EVM is required only on DME portions of investments. For mixed lifecycle investments, O&M milestones should still be included in the table (Comparison of Initial Baseline and Current Approved Baseline). This table should accurately reflect the milestones in the initial baseline, as well as milestones in the current baseline.

1. Does the earned value management system meet the No criteria in ANSI/EIA Standard-748?

2. Is the CV% or SV% greater than +/- 10%? (CV%= CV/EV x No 100; SV%= SV/PV x 100)

- a. If "yes," was it the CV or SV or both?
- b. If "yes," explain the causes of the variance:
- c. If "yes," describe the corrective actions:
- 3. Has the investment re-baselined during the past fiscal year? No
- a. If "yes," when was it approved by the agency head?

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4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in \$ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate '0' for any milestone no longer active.

Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		
		Planned Completion Date (mm/dd/yyy y)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule		Percent
				Planned	Actual	Planned	Actual	(# days)	Cost (\$M)	complete
Redacted										

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