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

Section A: Overview (All Capital Assets)

1. Date of Submission:	7/30/2007
2. Agency:	Department of Transportation
3. Bureau:	Federal Aviation Administration
4. Name of this Capital Asset:	FAAXX607: Terminal Automation Modernization and Replacement (TAMR)
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.)	021-12-01-11-01-1160-00
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 FY2006 submitted to OMB?

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:

This investment modernizes/replaces the automation systems that provide air traffic controllers with the information needed to safely and efficiently control air traffic in the terminal environment. Automation systems at nine locations currently present a risk to service due to limitations in system processor capacity and parts obsolescence. As a result, these systems are unable to support future capacity growth projections and new functionality. These operational shortfalls will be rectified by replacing/modernizing the existing automation systems with modern system processing equipment, thereby increasing computer memory and data processing capacity to accommodate additional functionality and support the projected growth in capacity. New color displays will help controllers better discern weather intensity, thereby improving safety. This investment was approved by the JRC in June 2005 and is being conducted in two segments.

The first segment will replace Automated Radar Terminal systems (ARTS IIE) at West Palm Beach, Pensacola, Anchorage, Corpus Christi, and Wichita with the Standard Terminal Automation Replacement (STARS) system. The systems were procured in October 2005, deliveries commenced in June 2006, and installations will begin in FY2007. This segment is currently in solution development (CPIC Control phase) but will begin transition to the operations and maintenance phase (CPIC Evaluate phase) in late 2007.

Segment two of this investment will replace the controller displays and local area networks in the ARTS IIIE systems at Chicago, Denver, Minneapolis/St. Paul, and, St. Louis. A competitive procurement was planned for this segment; however, in January 2006, the two qualified vendors identified by a market survey presented an alternate strategy to create a prime-sub relationship resulting in only one qualified source. In April 2006, the JRC approved a change in the acquisition strategy from competitive to single source. The Request for Proposal (RFP) was released in June 2006 and the contract was awarded in August 2006. This segment is currently in solution development (CPIC Control phase) but will begin to transition to the operations and maintenance phase (CPIC Evaluate phase) in mid-2008.

This investment also includes a technical refresh of the systems in 2009 through 2031 to avoid obsolescence and system performance degradation until future technologies related to the Next Generation Air Transport System (NGATS) are developed.

9. Did the Agency's Executive/Investment Committee approve this request?	Yes
a. If "yes," what was the date of this approval?	4/28/2006
10. Did the Project Manager review this Exhibit?	Yes
11. Contact information of Project Manager?	
Name	Mears, Sheryl
Phone Number	Redacted
Email	sheryl.mears@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	No

to non-IT assets only)

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 No initiatives?

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 No the Program Assessment Rating Tool (PART)? (For more information about the PART, visit www.whitehouse.gov/omb/part.)

a. If "yes," does this investment address a weakness found during a PART review?

b. If "yes," what is the name of the PARTed program?

c. If "yes," what rating did the PART receive?

15. Is this investment for information technology?

If the answer to Question 15 is "Yes," complete questions 16-23 below. If the answer is "No," do not answer questions 16-23.

Yes

For information technology investments only:

16. What is the level of the IT Project? (per CIO Council PM Level 3 Guidance)

17. What project management qualifications does the Project Manager have? (per CIO Council PM Guidance)

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)

19. Is this a financial management system?

No

Yes

investment

(1) Project manager has been validated as qualified for this

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 system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52

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

Hardware	0.000000
Software	0.000000
Services	0.000000
Other	100.000000
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	N/A

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?	Yes

Question 24 must be answered by all Investments:

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:	0	0	0	0	Redacted	Redacted	Redacted	Redacted	Redacted		
Acquisition:	19.8	30	6.807	0	Redacted	Redacted	Redacted	Redacted	Redacted		
Subtotal Planning & Acquisition:	19.8	30	6.807	0	Redacted	Redacted	Redacted	Redacted	Redacted		
Operations & Maintenance:	0	0.429	0.702	0	Redacted	Redacted	Redacted	Redacted	Redacted		
TOTAL:	19.8	30.429	7.509	0	Redacted	Redacted	Redacted	Redacted	Redacted		
	Governme	nt FTE Costs	should not	be included	in the amou	unts provide	d above.	•	•		
Government FTE Costs	4.419	20.957	59.745	0	Redacted	Redacted	Redacted	Redacted	Redacted		
Number of FTE represented by Costs:	4	19	54	49	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 No FTE's?

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

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/Ta	* Costs in millions												sts in millions			
Contract or Task Order Number			If so what is the date of the award? If not, what is the planned award date?	Start date of Contract/	End date of Contract/	Total Value of Contract/ Task Order (\$M)	Interagenc y	o bacod2	Competitive ly awarded?	What, if any, alternative financing option is being used? (ESPC, UESC, EUL, N/A)	the	Does the contract include the required security & privacy clauses? (Y/N)	Name of CO	CO Contact information (phone/em ail)	Contracting	has the competenci es and skills
Redacted																

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 TAMR Program has implemented an ANSI-compliant EVM system at the program level for all efforts associated with this investment. Although individual contracts or task orders for portions of the program efforts may not require formal earned value reporting, contractor program performance data, i.e. Cost/Schedule Status Reports, Contract Funds Status Reports, program schedules and program management reviews, is required and is incorporated into the program level EVM system. As part of the FAA's goal to have all programs be compliant with EVM Standard ANSI 748 for Total Program EVM reporting, the FAA's EVM assessment team is working closely with the Acquisition Organization and industry to incorporate this requirement into new, as well as existing contracts.

- 3. Do the contracts ensure Section 508 compliance?
 - a. Explain why:

No

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?

a. If "yes," what is the date?

4/28/2006

Yes

- 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	Performance Information Table										
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results			
2006	Safety	Customer Results	Customer Benefit	Customer Impact or Burden	of general aviation and nonscheduled Part 135 fatal	Number of general aviation and nonscheduled Part 135 fatal accidents is 385, which represents the average number of fatal accidents for baseline period of 1996-1998.	Jan 2011				
2006		Customer Results	Service Accessibility	Availability	System Availability	System Availability is: ARTS IIIE - 99.95%; STARS - 99.996%	Aug 2007- Dec 2008				
2006		Customer Results	Service Coverage	Service Efficiency	Passenger Value of Time (PVT) Benefits	Passenger Value of Time (PVT) Benefits = 0	Jan 2010				
2006		Mission and Business Results	Administrative Management	Facilities, Fleet, And Equipment Management	Aircraft Direct Operating Costs (ADOC) Benefits	Aircraft Direct Operating Costs (ADOC) Benefits = 0 (Reference Case)	Jan 2001				
2006		Mission and Business Results	Transportation	Air Transportation	Define requirements for 9 TAMR sites display	9 TAMR sites identified for display upgrade/replace	June 2006	June 2006			

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Performance In	erformance Information Table											
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results				
					upgrade/replace ment.	ment						
2006		Processes and Activities	Management and Innovation	Compliance	Number of IIIE sites that need NTSB safety recommendation s incorporated.	4 IIIE FDAD sites do not meet NTSB safety recommendation s due to lack of display memory.	Apr - Sep 2008					
2006		Technology	Efficiency	Load levels	Number of TAMR sites identified at risk due to the site's aniticpated traffic load.	utilization evaluated at 115	9 out 115 TAMR sites identified for processor upgrades - June 2006	June 2006				
2007		Customer Results	Customer Benefit	Customer Impact or Burden	Aircraft Direct Operating Costs (ADOC) Benefits	Aircraft Direct Operating Costs (ADOC) Benefits = 0 (Reference Case)	Jan 2011					
2007		Customer Results	Customer Benefit	Customer Impact or Burden	of general aviation and nonscheduled Part 135 fatal	Number of general aviation and nonscheduled Part 135 fatal accidents is 385, which represents the average number of fatal accidents for baseline period of 1996-1998.	Jan 2011					
2007		Customer Results	Service Accessibility	Availability	Availability percentage= (Total available hours-(Total Outage Time- Code 62 Outage Time)/Total Available Hours).	FAA requirement for Availability is greater than 99%. ARTS IIIE - 99.95%; STARS - 99.996%	Jan 2010					
2007		Mission and Business Results	Transportation	Air Transportation	Number of TAMR sites with display upgrade/replace ment		Sept 2007					
2007		Processes and Activities	Financial (Processes and Activities)	Savings and Cost Avoidance	Cost Avoidance based on avoiding capacity reductions at each airport resulted in savings in terminal area delays.	Reference Case (Do nothing scenario) operating costs would be avoided if new automation is placed in the nine (9) sites.	Jan 2008					
2007		Technology	Efficiency	Load levels	Number of sites that need processor upgrades to accomodate anticipated traffic loads.	9 TAMR sites require processor upgrades to accomodate anticpated traffic loads.	Sept. 2007					
2008		Customer Results	Customer Benefit	Customer Impact or Burden		Aircraft Direct Operating Costs (ADOC) Benefits = 0 (Reference Case)	Jan 2011					
2008		Customer Results	Customer Benefit	Customer Impact or Burden	of general aviation and nonscheduled Part 135 fatal	Number of general aviation and nonscheduled Part 135 fatal accidents is 385, which represents the average number of fatal accidents for baseline period of 1996-1998.	Jan 2011 (3 years after last install)					
2008		Customer Results	Service Accessibility	Availability	Availability percentage= (Total available hours-(Total Outage Time –	FAA requirement for Availability is greater than 99%.ARTS IIIE – 99.95%STARS –	Jan 2010					

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Performance In	erformance Information Table											
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results				
					Code 62 Outage Time)/Total Available Hours).	99.996						
2008		Customer Results	Service Coverage	Service Efficiency	Passenger Value of Time (PVT) Benefits	Passenger Value of Time (PVT) Benefits = 0	Jan 2010					
2008		Mission and Business Results	Transportation	Air Transportation	sites with display	6 TAMR sites identified for display upgrade/replace ment	Jul 2008					
2008		Processes and Activities	Financial (Processes and Activities)	Savings and Cost Avoidance	Cost Avoidance based on avoiding capacity reductions at each airport resulted in savings in terminal area delays.	Reference Case (Do nothing scenario) operating costs would be avoided if new automation is placed in the nine (9) sites.	Jan 2009					
2008		Technology	Efficiency	Load levels	Number of sites that need processor upgrades to accomodate anticipated traffic loads.	6 TAMR sites require processor upgrades to accomodate anticpated traffic loads.	Jan 2009					
2009		Customer Results	Customer Benefit	Customer Impact or Burden	Aircraft Direct Operating Costs (ADOC) Benefits	Aircraft Direct Operating Costs (ADOC) Benefits = 0 (Reference Case)	Jan 2011					
2009		Customer Results	Customer Benefit	Customer Impact or Burden	Average number of general aviation and nonscheduled Part 135 fatal accidents over a three-year period.	Number of general aviation and nonscheduled Part 135 fatal accidents is 385, which represents the average number of fatal accidents for baseline period of 1996-1998.	Jan 2011 (3 years after last install)					
2009		Customer Results	Service Accessibility	Availability	Availability percentage= (Total available hours-(Total Outage Time – Code 62 Outage Time)/Total Available Hours).	FAA requirement for Availability is greater than 99%.ARTS IIIE – 99.95%STARS – 99.996	Jul 2010					
2009		Customer Results	Service Coverage	Service Efficiency	Passenger Value of Time (PVT) Benefits	Passenger Value of Time (PVT) Benefits = 0	Jan 2010					
2009		Mission and Business Results	Transportation	Air Transportation	Number of TAMR sites with display upgrade/replace ment	3 TAMR sites identified for display upgrade/replace ment.	Jan 2010					
2009		Mission and Business Results	Transportation	Air Transportation	On time arrivals	TAMR contributes to the NAS goals of (1) improvement in on-time arrivals (from 87.4% to 87.7%)	Jan 2010					
2009		Processes and Activities	Financial (Processes and Activities)	Savings and Cost Avoidance	Cost Avoidance based on avoiding capacity reductions at each airport resulted in savings in terminal area delays.	Reference Case (Do nothing scenario) operating costs would be avoided if new automation is placed in the nine (9) sites.	Jan 2010					
2009		Technology	Efficiency	Load levels	Number of sites upgraded with increased to accommodate	3 TAMR sites identified with insufficient margin in data	Jul 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
					traffic loads.	processing capacity to accommodate anticipated traffic loads.		

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 0.14 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			tractor Operated tem?	Planned Ope	erational Date	Date of Planned C&A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)				
Redacted										
4. Operational Sys	tems - Security Ta	able:				•				
Name of System	Agency/ or Contractor Operated System? Low) NIST FIPS 199 (High, Moderate, Low) (Y/N) Has C&A been Completed, using NIST 800-37? (Y/N) Date Completed: C&A (High, Moderate, Low) (Y/N) (Y/N) (V/N) (V/		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?

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

Friday, January 25, 2008 - 11:05 AM Page 8 of 15 Exhibit 300: FAAXX607: Terminal Automation Modernization and Replacement (TAMR) Redacted 1-25-2008 a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness.

Redacted

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

(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
Common ARTS - Operational System	No	No	The system does not contain, process, or transmit personal identifying information.	No	The system is not a Privacy Act system of records.
Common ARTS - Planning System	No	No	The system does not contain, process, or transmit personal identifying information.	No	The system is not a Privacy Act system of records.
STARS - Operational System	No	No	The system does not contain, process, or transmit personal identifying information.	No	The system is not a Privacy Act system of records.
STARS - Planning System	No	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 targetYesenterprise architecture?

a. If "no," please explain why?

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

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?

To effectively balance the development and management of the DOT Transition Strategy, the first version was scoped to include those investments with development activities (non O&M). Additionally, as the NAS Architecture was publicly available, it was also not fully integrated with the materials forwarded to OMB in February 2006. However, the NAS is considered part of the DOT Transition Strategy and will be more fully integrated within the next revision. Future revisions are set to expand upon that scope and include both steady state (O&M) investments and expanded linkages to the NAS Architecture. Since this FAA investment does not appear to be specifically mentioned within the DOT Transition Strategy or the FAA Modernization Blueprint, please refer to the following public NAS websites which document the plan for the FAA's target architecture where the investment can be found as well as a sequencing plan showing the dependencies [See: NAS Operational Improvement Report - http://www.nas-architecture.faa.gov/nas5/downloads/full_oi_long_report.pdf].

FAA

Terminal Automation Modernization and Replacement (TAMR)-

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

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

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.

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EX	hibit 300: FAA	XX607: Termin	al Automation	Modernization			dacted 1-25-2	008
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)
Aircraft to Aircraft Separation Capability	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 defined for aircraft based on aircraft type, size, equipment, and for operating in different environments.	Business Management Services	Management of Processes	Program / Project Management			No Reuse	40
Aircraft to Aircraft Separation Capability	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 defined for aircraft based on aircraft type, size, equipment, and for operating in different environments.	Business Management Services	Management of Processes	Requirements Management			No Reuse	15
Aircraft to Aircraft Separation Capability	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 defined for aircraft based on	Business Management Services	Supply Chain Management	Logistics and Transportation			No Reuse	40

etc.). Provide this	information in the	e format of the fo	llowing table. For	detailed guidance			er to http://www.e	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)
	aircraft type, size, equipment, and for operating in different environments. (NAS ATC- Separation Assurance)							
	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	Customer Relationship Management	Customer Feedback			No Reuse	5

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 Mode				
To demonstrate how this major Service Specifications supportin		EA Technical Reference Model (T	RM), please list the Service Area	as, Categories, Standards, and
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)
Program / Project Management	Component Framework	Business Logic	Platform Independent	Redacted
Alerts and Notifications	Component Framework	Security	Supporting Security Services	Redacted
Logistics and Transportation	Service Access and Delivery	Access Channels	Other Electronic Channels	Redacted
Requirements Management	Service Access and Delivery	Service Requirements	Legislative / Compliance	Redacted
Program / Project Management	Service Access and Delivery	Service Transport	Supporting Network Services	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Database / Storage	Storage	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Redacted
Logistics and Transportation	Service Platform and	Hardware / Infrastructure	Network Devices / Standards	Redacted

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5. Technical Reference Mode	I (TRM) Table:			
		EA Technical Reference Model (T	RM), please list the Service Area	as, Categories, Standards, and
Service Specifications supportin	g 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)
	Infrastructure			
Logistics and Transportation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Redacted
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	Redacted
Logistics and Transportation	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	Redacted
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Modeling	Redacted
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Redacted
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Test Management	Redacted
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Test Management	Redacted
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Test Management	Redacted

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.

6. Will the application leverage existing components and/or No 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? 5/25/2005

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: * Costs in million Use the results of your alternatives analysis to complete the following table:								
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.

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					
ARTS HE		1/1/2009					
ARTS IIIE with FDAD		1/1/2009					

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.

 Does the investment have a Risk Management Plan? 	Yes
a. If "yes," what is the date of the plan?	6/10/2005
b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?	Yes

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

The Program Office identified and quantified the programmatic risks (as documented in CARTS Risk Matrix/register). The TAMR Risk Management Board (RMB) meets on a monthly basis to discuss the risk status and mitigation strategies. During the last 22 months, 33 risks were identified. During this time period, 25 risks were retired and a risk realization date has been established for each risk. TAMR risks are tracked in the FAA's DOORS data base. The TAMR risk database is updated a minimum of once every month. The TAMR RMB distributes meeting minutes to all TAMR RMB members. TAMR risks are briefed at monthly Internal Program Reviews as well as the Automation Sector Review, which is held every six weeks.

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- 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:

TAMR has incorporated management reserves for planned costs of \$2,024,505 during the period FY06 to FY08. The Program has expended \$0. A management reserve balance of \$2,024,505 remains.

The lifecycle BY05 point estimate (without risk) of \$238.426M was modified to address both the uncertainty associated with the estimate as well as the risk associated with meeting the program objectives in a Fixed Price contract environment. The lifecycle point risk estimate (with risk) was \$249.386M. The risk of \$10.960M was added to the life cycle cost estimates on F&E and O&M.

The Program Office identified and quantified the programmatic risks (as documented in CARTS Risk Matrix) and, along with the cost team, incorporated those cost risks into the risk ranges on individual WBS elements. Monte Carlo simulation was utilized to determine the overall effect of the individual risk elements on the estimate. The total risk dollars required to meet an 80% confidence level for program execution were then allocated back into the Work Breakdown Structure (WBS) elements based on their individual risk level.

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 Yes 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?

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			Curre	Current Baseline			Current Baseline Variance	
		Planned Completion Total Cost (\$		(mann / d	ion Date d⁄yyyy)	Total Cost (\$M)		Schedule		Percent
		Date (mm/dd/yyy y)	Estimated	Planned	Actual	Planned	Actual	(# days)	Cost (\$M)	Complete
Redacted										

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