Exhibit 300: Capital Asset Plan and Business Case Summary

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

Section A: Overview (All Capital Assets)

1. Date of Submission:	9/10/2007
2. Agency:	Department of Transportation
3. Bureau:	Federal Railroad Administration
4. Name of this Capital Asset:	FRAXX316: Track Research Instrumentation Platform Information Systems (TRIP/IS)
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.)	021-27-01-16-01-1010-00
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?	FY2004

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:

The Track Research Instrumentation Platform Information System (TRIP/IS) is the information technology component of the two TRIP railroad vehicles called T-16 and T-18 that are owned by the Federal Railroad Administration (FRA) but operated through contracted support. The T-16 TRIP vehicle was procured in 1999 by FRA to provide the support necessary for the development of a high-speed Track Geometry Measurement System in response to FRA's new Track Safety Standard established in 1998 for operations at speeds higher than 110 mph. The T-18 TRIP vehicle was procured in 2004 to develop a new generation of Gage Restraint Measurement System to replace the outdated T-6 vehicle that had many operational limitations. The TRIP vehicles are primarily used for the development and demonstration of R&D research products for the advancement of track inspection technologies and improvement of railroad safety. The objectives of the TRIP program are to provide FRA with the type and quality of equipment needed to meet the railroad technology and safety research objectives of FRA's mission. These objectives include: 1) support the FRA Office of Safety to ensure compliance with the Federal Track Safety Standards; 2) test and demonstrate new testing and research technologies; 3) conduct performance based testing of track; 4) assist the railroad with the data collection and analysis for safe track infrastructure, operations, and maintenance; and 5) maintain the FRA capability to independently evaluate railroad infrastructure integrity. In support of the DOT/FRA missions, TRIP/IS must ensure data accuracy, IT system reliability/availability, and information sharing efficiency.
The TRIP/IS includes the data acquisition systems, data management system, and post processing analysis tools housed onboard the research vehicles but does not include the cars that houses the information systems. The items considered part of the TRIP/IS are the signal conditioning units, computers, monitors, printers, mice, keyboards, scanners, CDs, uninterrupted power supply, computer racks, switches, and external drives. TRIP/IS covers the maintenance and operation of the existing TRIP/IS initiatives, as well as, enhancement such as technology refreshers necessary to accommodate any new R&D prototypes and ideas as they become available for the long-term demonstration on TRIP or any corrective actions on the TRIP/IS to improve the TRIP vehicle capabilities.

9. Did the Agency's Executive/Investment Committee approve this request?	Yes
a. If "yes," what was the date of this approval?	11/26/2006
10. Did the Project Manager review this Exhibit?	Yes
11. Contact information of Project Manager?	
Name	Lee, Sung
Phone Number	Redacted
Email	sung.lee@dot.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?	Yes
If "yes," check all that apply:	Expanded E-Government
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?)	This initiative supports the PMA goal of Expanded E-Government by improving service to citizens and by providing an electronic interface of track anomaly data to other federal government agencies, the railroad industry and state inspection programs. The TRIP/IS uses information technology to enhance and automate TRIP program data gathering and dissemination, enabling improved productivity, efficiency, and accuracy to the FRA's railroad safety research and testing.
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?	No
b. If "yes," what is the name of the PARTed program?	Federal Railroad Administration Research and Development Program
c. If "yes," what rating did the PART receive?	Moderately Effective
15. Is this investment for information technology?	Yes

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

For information technology investments only:

16. What is the level of the IT Project? (per CIO Council PM Guidance)	Level 1
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)	No
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 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	6.000000
Software	7.000000
Services	38.000000
Other	49.000000
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 included in your agency inventory, schedules and priorities?	N/A

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

Name	Wissman, David
Phone Number	Redacted
Title	FRA Privacy Officer
E-mail	david.wissman@dot.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:	
24. Does this investment directly support one of the GAO High Risk Areas?	No

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	0
Acquisition:	0.347	0.025	0.269	0.03	Redacted	Redacted	Redacted	Redacted	Redacted
Subtotal Planning & Acquisition:	0.347	0.025	0.269	0.03	Redacted	Redacted	Redacted	Redacted	Redacted
Operations & Maintenance:	0.488	0.244	0.349	0.269	Redacted	Redacted	Redacted	Redacted	Redacted
TOTAL:	0.835	0.269	0.618	0.299	Redacted	Redacted	Redacted	Redacted	Redacted
Government FTE Costs should not be included in the amounts provided above.									
Government FTE Costs	0.082	0.053	0.099	0.079	Redacted	Redacted	Redacted	Redacted	Redacted
Number of FTE represented by Costs:	1	9	9	9	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 FTE's? No

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/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 Interagency Acquisition? (Y/N)	Is it performance based? (Y/N)	Competitively 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/email)	Contracting Officer Certification Level (Level 1,2,3,N/A)	If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? (Y/N)
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:

3. Do the contracts ensure Section 508 compliance?	N/A
a. Explain why:	Section 508 compliance is not applicable to this investment since Railroad Safety standards restrict personnel who have sight, hearing, ambulatory, or tactile disabilities from working on the TRIP vehicles. At present, no TRIP/IS data is posted on a website or other system that would require Section 508 compliance for display and/or access.
4. Is there an acquisition plan which has been approved in accordance with agency requirements?	Yes
a. If "yes," what is the date?	8/22/2006
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 Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
2006	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total number of test days	42 test days	Increase by 19 additional test days to 61 test days	22 test days - Reason for lower test days are the TRIP/IS System used by FRA Office of Safety for track inspections and T-18 enhancements
2006	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the number of business days required to respond to questions regarding TRIP/IS data	10 business days	Decrease by 1 business day to 9 business days	Average 6.5 business days
2006	Safety	Mission and Business Results	Transportation	Ground Transportation	Number of R&D testing days impacted by TRIP/IS problems requiring additional analysis effort/declaring test data as unusable	10 testing days	Decrease by .5 testing day to 9.5 testing days	5 testing days
2006	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and tools TRIP/IS has supported for the advancement of technology	15 R&D products	Increase by 1 R&D product to 16 R&D products	15 R&D products
2006	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Maintenance cost per mile	$100.00 Maintenance	Decrease by 10%	$88.00 Maintenance

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
						cost per mile		cost per mile
2006	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Operations cost per mile	$250.00 Operations cost per mile	Decrease by 10%	$202.00 Operations cost per mile per vehicle
2006	Safety	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Total number of IT improvements to TRIP/IS	4 IT improvements to TRIP/IS	Increase by 1 R&D product to 5 R&D Products	5 R&D Products
2006	Safety	Technology	Reliability and Availability	Availability	Number downtime hours during TRIP/IS test operation	15% downtime hours during TRIP/IS test operations	Decrease by 1% downtime hours during TRIP/IS test operations	9% downtime hours
2007	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total cumulative number of test days	22 test days	35 additional test days	TBD December 2007
2007	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the average number of business days required to respond to questions regarding TRIP/IS data	Average 6.5 business days	Decrease by .25 business days to 6.25 business days	TBD December 2007
2007	Safety	Mission and Business Results	Transportation	Ground Transportation	Percentage of R&D testing days impacted by TRIP/IS problems requiring additional analysis effort/declaring test data as unusable	22.5 percent of testing days	Decrease by 1 percent of testing days	TBD December 2007
2007	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and tools TRIP/IS has supported for the advancement of technology	15 R&D products	Increase by 1 R&D product	TBD December 2007
2007	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average maintenance cost per mile	$88.00 Maintenance cost	1% decrease	TBD December 2007
2007	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average operations cost per mile	$202.00 Operations cost per mile	1% decrease	TBD December 2007
2007	Safety	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Total number of IT improvements to TRIP/IS	5 R&D Products	2 additional IT improvements	TBD December 2007
2007	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of high level system secrity vulnerabilities from the time of discovery	24-48 hours	6-18 hours	TBD October 2007
2007	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of medium and low level system security vulnerabilities from the time of discovery	Medium: 120-160 days, Low: 160-360 months	Medium: < 60 days, Low: < 180 days	TBD October 2007
2007	Safety	Technology	Reliability and Availability	Availability	Percentage of downtime hours during TRIP/IS test operation	9% downtime hours during TRIP/IS test operations	1% decrease	TBD December 2007
2008	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total cumulative number of test days	Baseline TBD on prior year's actual performance	35 additional test days	TBD December 2008
2008	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the average number of business days	Baseline TBD on prior year's actual	Decrease by .25 business days	TBD December 2008

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					required to respond to questions regarding TRIP/IS data	performance		
2008	Safety	Mission and Business Results	Transportation	Ground Transportation	Percentage of R&D testing days impacted by TRIP/IS problems requiring additional analysis effort/declaring test data as unusable	22.5 percent of testing days	Decrease by 1 percent of testing days	TBD December 2008
2008	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and tools TRIP/IS has supported for the advancement of technology	Baseline TBD on prior year's actual performance	Increase by 1 R&D product	TBD December 2008
2008	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average maintenance cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2008
2008	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average operations cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2008
2008	Safety	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Total number of IT improvements to TRIP/IS	Baseline TBD on prior year's actual performance	2 additional IT improvements	TBD December 2008
2008	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of high level system secrity vulnerabilities from the time of discovery	24-48 hours	6-18 hours	TBD October 2008
2008	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of medium and low level system security vulnerabilities from the time of discovery	Medium: 120-160 days, Low: 160-360 months	Medium: < 60 days, Low: < 180 days	TBD October 2008
2008	Safety	Technology	Reliability and Availability	Availability	Percentage of downtime hours during TRIP/IS test operation	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2008
2009	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total cumulative number of test days	Baseline TBD on prior year's actual performance	35 additional test days	TBD December 2009
2009	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the average number of business days required to respond to questions regarding TRIP/IS data	Baseline TBD on prior year's actual performance	Decrease by .25 business days	TBD December 2009
2009	Safety	Mission and Business Results	Transportation	Ground Transportation	Percentage of R&D testing days impacted by TRIP/IS problems requiring additional analysis effort/declaring test data as unusable	Baseline TBD on prior year's actual performance	Decrease by 1 percent of testing days	TBD December 2009
2009	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and	Baseline TBD on prior year's actual	Increase by 1 R&D product	TBD December 2009

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					tools TRIP/IS has supported for the advancement of technology	performance		
2009	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average maintenance cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2009
2009	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average operations cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2009
2009	Safety	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Total number of IT improvements to TRIP/IS	Baseline TBD on prior year's actual performance	2 additional IT improvements	TBD December 2009
2009	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of high level system security vulnerabilities from the time of discovery	24-48 hours	6-18 hours	TBD October 2009
2009	Organizational Excellence	Technology	Information and Data	External Data Sharing	Medium: 120-160 days, Low: 160-360 months	Medium: 120-160 days, Low: 160-360 months	Medium: < 60 days, Low: < 180 days	TBD October 2009
2009	Safety	Technology	Reliability and Availability	Availability	Percentage of downtime hours during TRIP/IS test operation	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2009
2010	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total cumulative number of test days	Baseline TBD on prior year's actual performance	35 additional test days	TBD December 2010
2010	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the average number of business days required to respond to questions regarding TRIP/IS data	Baseline TBD on prior year's actual performance	Decrease by .25	TBD December 2010
2010	Safety	Mission and Business Results	Transportation	Ground Transportation	Percentage of R&D testing days impacted by TRIP/IS problems requiring additional analysis effort/declaring test data as unusable	Baseline TBD on prior year's actual performance	Decrease by 1 percent of testing days	TBD December 2010
2010	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and tools TRIP/IS has supported for the advancement of technology	Baseline TBD on prior year's actual performance	Increase by 1 R&D product	TBD December 2010
2010	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average maintenance cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2010
2010	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average operations cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2010
2010	Safety	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Total number of IT improvements to TRIP/IS	Baseline TBD on prior year's actual performance	2 additonal IT improvements	TBD December 2010
2010	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of high level system security vulnerabilities form the time of	24-48 hours	6-18 hours	TBD October 2010

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					discovery			
2010	Organizational Excellence	Technology	Information and Data	External Data Sharing	Medium: 120-160 days, Low: 160-360 months	Medium: 120-160 days, Low: 160-360 months	Medium:< 60 days, Low: < 180 days	TBD October 2010
2010	Safety	Technology	Reliability and Availability	Availability	Percentage of downtime hours during TRIP/IS test operation	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2010
2011	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total cumulative number of test days	Baseline TBD on prir year's actual performance	35 additional test days	TBD December 2011
2011	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the average number of business days required to respond to questions regarding TRIP/IS data	Baseline TBD on prior year's actual performance	Decrease by .25 business days	TBD December 2011
2011	Safety	Mission and Business Results	Transportation	Ground Transportation	Percentage of R&D testing days impacted by TRIP/IS problems requiring additional analysis effort/declaring test data as unusable	Baseline TBD on prior year's actual performance	Decrease by 1 percent of testing days	TBD December 2011
2011	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and tools TRIP/IS has supported for the advancement of technology	Baseline TBD on prior year's actual performance	Increase by 1 R&D product	TBD December 2011
2011	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average maintenance cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2011
2011	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average operations cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2011
2011	Safety	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Total number of IT improvements to TRIP/IS	Baseline TBD on prior year's actual performance	2 additional IT improvements	TBD December 2011
2011	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of high level system security vulnerabilities from the time of discovery	24-48 hours	6-18 hours	TBD October 2011
2011	Organizational Excellence	Technology	Information and Data	External Data Sharing	Medium: 120-160 days, Low: 160-360 months	Medium: 120-160 days, Low: 160-360 months	Medium: < 60 days, Low: < 180 days	TBD October 2011
2011	Safety	Technology	Reliability and Availability	Availability	Percentage of downtime hours during TRIP/IS test operation	Baseline TBD on prior year's actual results	1% decrease	TBD December 2011
2012	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total cumulative number of test days	Baseline TBD on prior year's actual results	35 additional test days	TBD December 2012
2012	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the average number of business days required to respond to questions regarding TRIP/IS data	Baseline TBD on prior year's actual performance	Decrease by .25 business days	TBD December 2012
2012	Safety	Mission and Business Results	Transportation	Ground Transportation	Percentage of R&D testing days impacted by TRIP/IS	Baseline TBD on prior year's actual performance	Decrease by 1 percent of testing days	TBD December 2012

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					problems requiring additional analysis effort/declaring test data as unusuable			
2012	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and tools TRIP/IS has supported for the advancement of technology	Baseline TBD on prior year's actual performance	Increase by 1 R&D product	TBD December 2012
2012	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average maintenance cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2012
2012	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average operatins cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2012
2012	Safety	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Total number ot IT improvements to TRIP/IS	Baseline TBD on prior year's actual performance	2 additional IT improvements	TBD December 2012
2012	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of high level system security vulnerabilities from the time of discovery	24-48 hours	6-18 hours	TBD October 2012
2012	Organizational Excellence	Technology	Information and Data	External Data Sharing	Medium: 120-160 days, Low: 160-360 months	Medium: 120-160 days, Low: 160-360 months	Medium: <60 days, Low: 180 days	TBD October 2012
2012	Safety	Technology	Reliability and Availability	Availability	Percentage of downtime hours during TRIP/IS test operation	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2012
2013	Safety	Customer Results	Service Coverage	Frequency and Depth	Increase total cumulative number of test days	Baseline TBD on prior year's actual performance	35 additional test days	TBD December 2012
2013	Safety	Customer Results	Timeliness and Responsiveness	Response Time	Decrease the average number of business days required to respond to questions regarding TRIP/IS data	Baseline TBD on prior year's actual performance	Decrease by .25 business days	TBD December 2013
2013	Safety	Mission and Business Results	Transportation	Ground Transportation	Percentage of R&D testing days impacted by TRIP/IS problems requiring additional analysis effort/declaring test data as unusable	Baseline TBD on prior year's actual performance	Decrease by 1 percent of testing days	TBD December 2013
2013	Safety	Mission and Business Results	Transportation	Ground Transportation	Increase total number of R&D products and tools TRIP/IS has supported for the advancement of technology	Baseline TBD on prior year's actual performance	Increase by 1 R&D product	TBD December 2013
2013	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average maintenance cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2013
2013	Safety	Processes and Activities	Productivity and Efficiency	Productivity	Average operations cost per mile per each vehicle	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2013
2013	Safety	Technology	Effectiveness	IT Contribution	Total number of	Baseline TBD on	2 additional IT	TBD December

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
				to Process, Customer, or Mission	IT improvements to TRIP/IS	prior year's actual performance	improvements	2013
2013	Organizational Excellence	Technology	Information and Data	External Data Sharing	Reduce the timeframe for the remediation of high level system security vulnerabilities from the time of discovery	24-48 hours	6-18 hours	TBD October 2009
2013	Organizational Excellence	Technology	Information and Data	External Data Sharing	Medium: 120-160 days, Low: 160-360 months	Medium: 120-160 days, Low: 160-360 months	Medium: < 60 days, Low: < 180 days	TBD October 2013
2013	Safety	Technology	Reliability and Availability	Availability	Percentage of downtime hours during TRIP/IS test operation	Baseline TBD on prior year's actual performance	1% decrease	TBD December 2013

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 and integrated into the overall costs of the investment:	Yes
a. If "yes," provide the "Percentage IT Security" for the budget year:	32.000000
2. Is identifying and assessing security and privacy risks a part of the overall risk management effort for each system supporting or part of this investment.	Yes

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 Systems - Security Table:							
Name of System	Agency/ or Contractor Operated System?	NIST FIPS 199 Risk Impact level (High, Moderate, Low)	Has C&A been Completed, using NIST 800-37? (Y/N)	Date Completed: C&A	What standards were used for the Security Controls tests? (FIPS 200/NIST 800-53, NIST 800-26, 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 the systems part of or supporting this investment been identified by the agency or IG?	Yes
a. If "yes," have those weaknesses been incorporated into the agency's plan of action and milestone process?	Yes
6. Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses?	Redacted

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

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
Track Research Instrumentation Platform Information System (TRIP/IS) - Operational	No	No		No	
Track Research Instrumentation Platform Information System (TRIP/IS) - Planning	No	No		No	

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?	
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.	FRA Track Research Instrumentation Platform Information System (TRIP/IS)
b. If "no," please explain why?	
3. Is this investment identified in a completed (contains a target architecture) and approved segment architecture?	No
a. If "yes," provide the name of the segment architecture as 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 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)

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 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)
Forensics	Defines the set of capabilities that support the analysis of physical elements using science and technology for investigative and legal purposes.	Business Analytical Services	Analysis and Statistics	Forensics			No Reuse	10
Decision Support and Planning	Defines the set of capabilities that support the analyze information and predict the impact of decisions before they are made.	Business Analytical Services	Business Intelligence	Decision Support and Planning			No Reuse	10
Ad-Hoc	Defines the set of capabilities that support the use of dynamic reports on an as needed basis.	Business Analytical Services	Reporting	Ad Hoc			No Reuse	10
Standardized / Canned	Defines the set of capabilities that support the use of pre-conceived or pre-written reports.	Business Analytical Services	Reporting	Standardized / Canned			No Reuse	10
Quality Management	Defines the set of capabilities intended to help determine the level that a product or service satisfies certain requirements.	Business Management Services	Management of Processes	Quality Management			No Reuse	10
Information Retrieval	Defines the set of capabilities that allow access to data and information for use by an organization and its stakeholders.	Digital Asset Services	Knowledge Management	Information Retrieval			No Reuse	10
Information Sharing	Defines the set of capabilities that support the use of documents and data in a multi-user environment for use by an organization and its stakeholders.	Digital Asset Services	Knowledge Management	Information Sharing			No Reuse	10
Knowledge Capture	Defines the set of capabilities that facilitate collection of data and information	Digital Asset Services	Knowledge Management	Knowledge Capture			No Reuse	20
Knowledge Distribution and Delivery	Defines the set of capabilities that support the transfer of knowledge to	Digital Asset Services	Knowledge Management	Knowledge Distribution and Delivery			No Reuse	10

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 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)
	the end customer.							

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)
Forensics	Component Framework	Business Logic	Platform Independent	Redacted
Information Sharing	Component Framework	Data Management	Database Connectivity	Redacted
Information Retrieval	Component Framework	Data Management	Database Connectivity	Redacted
Decision Support and Planning	Component Framework	Data Management	Database Connectivity	Redacted
Knowledge Distribution and Delivery	Component Framework	Data Management	Database Connectivity	Redacted
Information Sharing	Service Access and Delivery	Access Channels	Other Electronic Channels	Redacted
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Other Electronic Channels	Redacted
Information Sharing	Service Access and Delivery	Access Channels	Other Electronic Channels	Redacted
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Other Electronic Channels	Redacted
Information Sharing	Service Access and Delivery	Access Channels	Web Browser	Redacted
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Web Browser	Redacted
Information Sharing	Service Access and Delivery	Access Channels	Web Browser	Redacted
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Web Browser	Redacted
Knowledge Capture	Service Access and Delivery	Access Channels	Wireless / PDA	Redacted
Information Sharing	Service Access and Delivery	Access Channels	Wireless / PDA	Redacted
Knowledge Capture	Service Access and Delivery	Access Channels	Wireless / PDA	Redacted
Information Sharing	Service Access and Delivery	Service Requirements	Legislative / Compliance	Redacted
Knowledge Distribution and Delivery	Service Access and Delivery	Service Requirements	Legislative / Compliance	Redacted
Information Sharing	Service Interface and Integration	Integration	Enterprise Application Integration	Redacted
Knowledge Distribution and Delivery	Service Interface and Integration	Integration	Enterprise Application Integration	Redacted
Information Sharing	Service Interface and Integration	Integration	Enterprise Application Integration	Redacted
Knowledge Distribution and Delivery	Service Interface and Integration	Integration	Enterprise Application Integration	Redacted
Information Sharing	Service Interface and Integration	Interoperability	Data Format / Classification	Redacted
Knowledge Distribution and Delivery	Service Interface and Integration	Interoperability	Data Format / Classification	Redacted
Quality Management	Service Platform and Infrastructure	Database / Storage	Database	Redacted
Standardized / Canned	Service Platform and Infrastructure	Delivery Servers	Web Servers	Redacted
Ad Hoc	Service Platform and Infrastructure	Delivery Servers	Web Servers	Redacted
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	Redacted

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)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	Redacted
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Support Platforms	Platform Independent	Redacted
Information Sharing	Service Platform and Infrastructure	Support Platforms	Platform Independent	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 applications across the Government (i.e., FirstGov, Pay.Gov, etc)? Yes

a. If "yes," please describe.

There is a plan to include the TRIP program in the FRA Office of R&D Memorandum of Agreement with the Department of Energy to pursue possible cost sharing of GRMS and Track Geometry data collection and analysis support for the safe shipment of spent nuclear fuels.

In addition, there is a cooperative agreement with members of the railroad industry and state & local governments to perform joint research and also to keep them informed of new technologies as they are developed.

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? 5/16/2005

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 millions

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 or in-whole? No

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

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? 7/10/2007

b. Has the Risk Management Plan been significantly changed since last year's submission to OMB? No

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

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:

As an R&D organization, it is imperative that research activities are pushed to the limits for identification/refinement of advanced technology. FRA R&D accepts certain levels of risk associated with research projects and tries to minimize the impact by dividing the whole project into smaller incremental developmental phases where "go or no go" decisions are made upon evaluation of the potential return on the investment. By the time this research idea or prototype is ready for installation on the TRIP vehicle, it has gone through many design phases. At times, laboratory or short revenue testing requires only that the interface work between the current operational systems on the TRIP and the new system being installed. With the requirement

to use COTS components for the TRIP/IS, the investment risks of the systems ready for installation on the TRIP/IS are minimal and has little reflection in the life cycle cost estimate and investment schedule.

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 criteria in ANSI/EIA Standard-748?	No
2. Is the CV% or SV% greater than +/- 10%? (CV%= CV/EV x 100; SV%= SV/PV x 100)	No

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		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost ($M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost ($M)		Schedule (# days)	Cost ($M)	
				Planned	Actual	Planned	Actual			
Redacted										