



**U.S. Department of
Transportation**

BUDGET ESTIMATES

FISCAL YEAR 2008

**RESEARCH AND
INNOVATIVE TECHNOLOGY
ADMINISTRATION**

**SUBMITTED FOR THE USE OF
THE COMMITTEES ON APPROPRIATIONS**

**FY 2008 Congressional Budget Request
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Section 1: Overview

**Research and Innovative Technology Administration (RITA)
FY 2008 Congressional Budget Request**

Administrator's Overview

The Research and Innovative Technology Administration (RITA) is dedicated to coordinating, facilitating and reviewing the Department of Transportation's (DOT) Research Development and Technology (RD&T) activities, and to advancing the development and deployment of innovative technologies and concepts that will improve our mobility, promote economic growth, and ultimately deliver a better integrated transportation system.

The FY 2008 budget request for the RITA totals \$39,000,000, an increase of \$3,303,000 or 9 percent over the FY 2007 President's budget request. This request provides \$5,000,000 for the Nationwide Differential Global Positioning System (NDGPS) Program and also reflects the funding levels authorized in the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU, P.L. 109-59, August 8, 2005).

This budget request continues RITA's commitment to focusing DOT research, development and technology efforts on the strategic objectives of the *DOT Strategic Plan*, expressed through the development of the *Five-Year DOT Research, Development and Technology Strategic Plan* and guided by the executive-level DOT RD&T Planning Council.

RITA's Mandate

The Norman Y. Mineta Research and Special Programs Improvement Act (P.L. 108-426, November 30, 2004, the "Mineta Act"), assigned the following responsibilities to RITA:

- coordination, facilitation, and review of the Department's research and development programs and activities;
- advancement, and research and development, of innovative technologies, including intelligent transportation systems;
- comprehensive transportation statistics research, analysis, and reporting;
- education and training in transportation and transportation-related fields;
- activities of the Volpe National Transportation Systems Center; and
- other powers and duties prescribed by the Secretary.

RITA's SAFETEA-LU Responsibilities

A significant portion of RITA's budget request supports the authorized SAFETEA-LU programs delegated to RITA by the Secretary as supporting RITA's mandate. These programs include:

- National Intermodal System Improvement Plan (sec. 4149);
- Transportation Research and Development Strategic Planning (sec. 5208);
- National Cooperative Freight Research Program (sec. 5209);
- University Transportation Research (secs. 3036, 5401, 5402);
- Commercial Remote Sensing Products and Spatial Information Technologies (sec. 5506);
- and the mandates of the Bureau of Transportation Statistics (sec. 5601).

Summary of FY 2008 Budget Request

RITA's FY 2008 budget request of \$39,000,000 is composed of \$27,000,000 from the Highway Trust Fund and \$12,000,000 from the General Fund. In addition, RITA will undertake over \$300 million in transportation-related research, analysis, technology deployment, education and training on a reimbursable basis. To summarize RITA's FY 2008 budget request:

Research, Development and Technology

RITA's *Office of Research, Development and Technology* (RD&T) leads the Department's work in RD&T strategic planning, coordination, facilitation and review; manages the University Transportation Centers (UTC) Program; and manages RITA's national RD&T programs and grants. The requirements to support these programs are reflected in budget requests for:

- RD&T Coordination;
- Hydrogen Fuels Safety R&D (in support of the President's Hydrogen Initiative); and
- Nationwide Differential Global Positioning System (NDGPS) Program.

Transportation Statistics

RITA's *Bureau of Transportation Statistics* (BTS) develops and disseminates transportation data and high quality information, advancing effective use in public and private transportation decision making, through programs addressing:

- Freight Statistics;
- Transportation Economics;
- Geospatial Information Systems;
- Statistical Methods and Standards; and
- the National Transportation Library.

Consulting and Other Professional Services

RITA will conduct over \$300 million in transportation-related research, analysis, technology deployment, education and training during FY 2008:

- *John A. Volpe National Transportation Systems Center* (Volpe Center) (Cambridge, MA) provides research, analysis, technology deployment, and other technical knowledge and expertise to DOT and non-DOT customers with specific transportation systems projects or issues, on a fee-for-service basis.
- *Transportation Safety Institute (TSI)* (Oklahoma City, OK) provides training to more than 30,000 DOT and non-DOT transportation professionals annually in transportation safety and security, on a fee-for-service and tuition basis.
- *University Transportation Centers (UTC) Program* advances U.S. technology and expertise in the many transportation disciplines, and advances DOT RD&T priorities, through grants for transportation education, research and technology transfer at university-based centers of excellence.

RITA's Support for the Strategic Objectives of the DOT Strategic Plan

While working to fulfill its legislative mandate and the broader RD&T coordination mission for DOT, RITA uses the *DOT Strategic Plan* to guide programmatic and administrative decisions, and to formulate and manage resource requirements.

The FY 2008 budget request supports all of the Department's strategic objectives. Examples of the linkage between these objectives and RITA's FY 2008 programs include:

Safety [\$426,000]

- Undertaking hydrogen safety R&D, and accelerating the hydrogen safety education and training initiative with the National Association of State Fire Marshals.
- Providing multimodal safety training at the Transportation Safety Institute, as part of RITA's reimbursable programs.

Reduced Congestion [\$7,106,000]

- Enhancing transportation planning and operations by distributing transportation data through the National Transportation Atlas Databases (NTAD), and supporting the transportation component of the National Spatial Data Infrastructure (NSDI).
- Providing sophisticated mapping support to the DOT Crisis Management Center (CMC).
- Performing system engineering toward development of a Civil Positioning, Navigation and Timing (PNT) Architecture.

Global Connectivity [\$20,426,000]

- Conducting and analyzing the Commodity Flow Survey (CFS).
- Supplying technical support for the International Trade Data System (ITDS) and developing the portal interface for DOT users.

Environmental Stewardship [\$426,000]

- Leading the Department's participation in the President's Hydrogen Initiative, the Hydrogen R&D Interagency Task Force, and the International Partnership for a Hydrogen Economy (IPHE).
- Conducting research in hydrogen fuels technology, including a hydrogen infrastructure analysis study and hydrogen materials compatibility research.

Security [\$0]

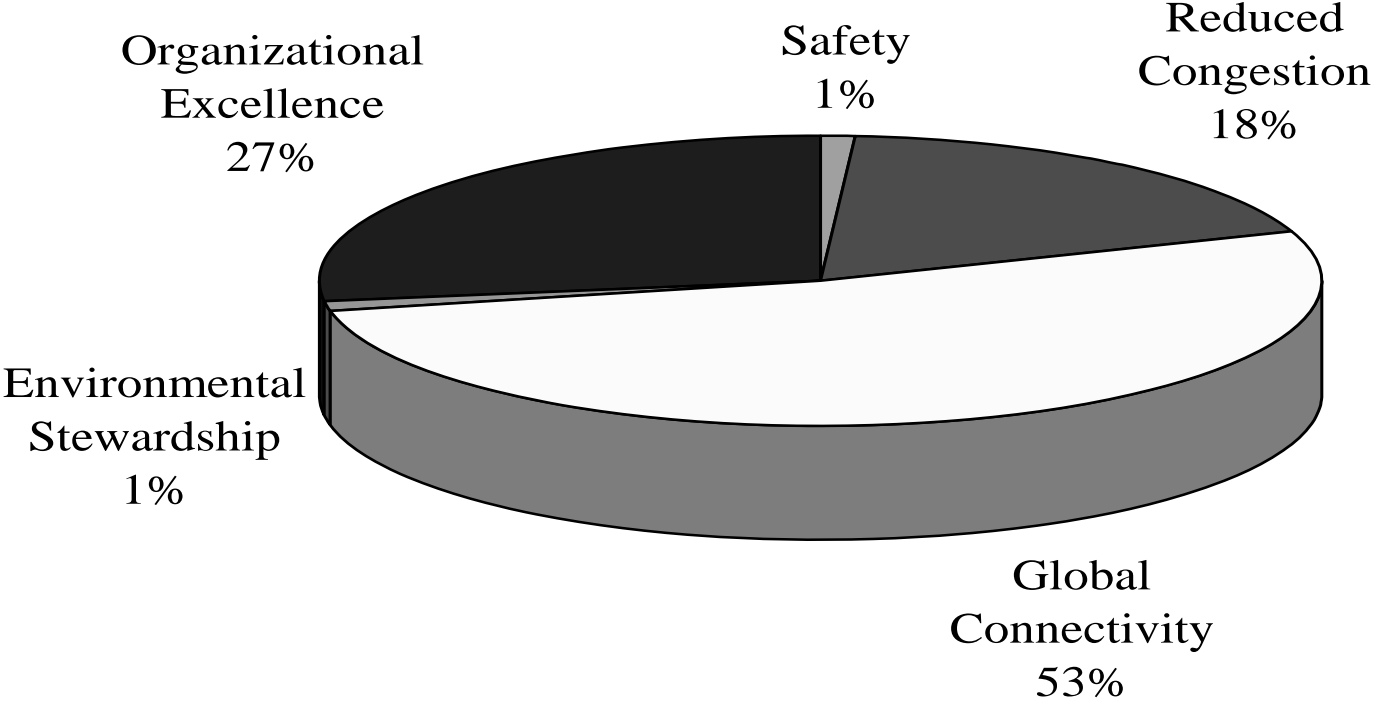
- Providing significant technical and training support to DOT and non-DOT transportation security activities through the Volpe National Transportation Systems Center and the Transportation Safety Institute, as part of RITA's reimbursable programs.

Organizational Excellence [\$10,616,000]

- Completing, and tracking and reporting status and results against, the *DOT Five-Year RD&T Strategic Plan*.
- Leveraging the resources of the National Transportation Library to develop an accessible transportation knowledge network

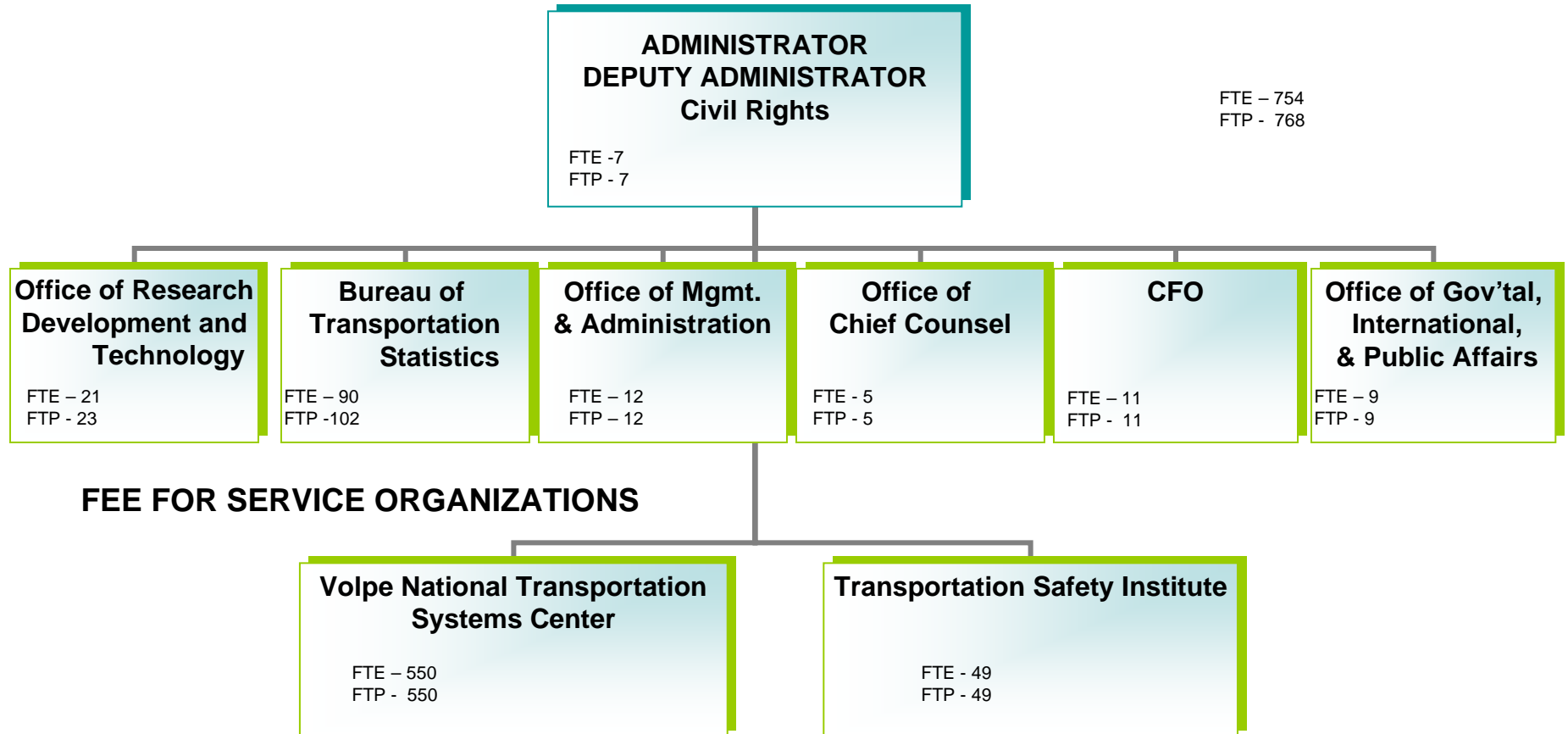
- Increasing the relevance to DOT and national RD&T priorities of the transportation research activities undertaken by the university centers funded through the UTC Program.

RITA Support to DOT Strategic Objectives



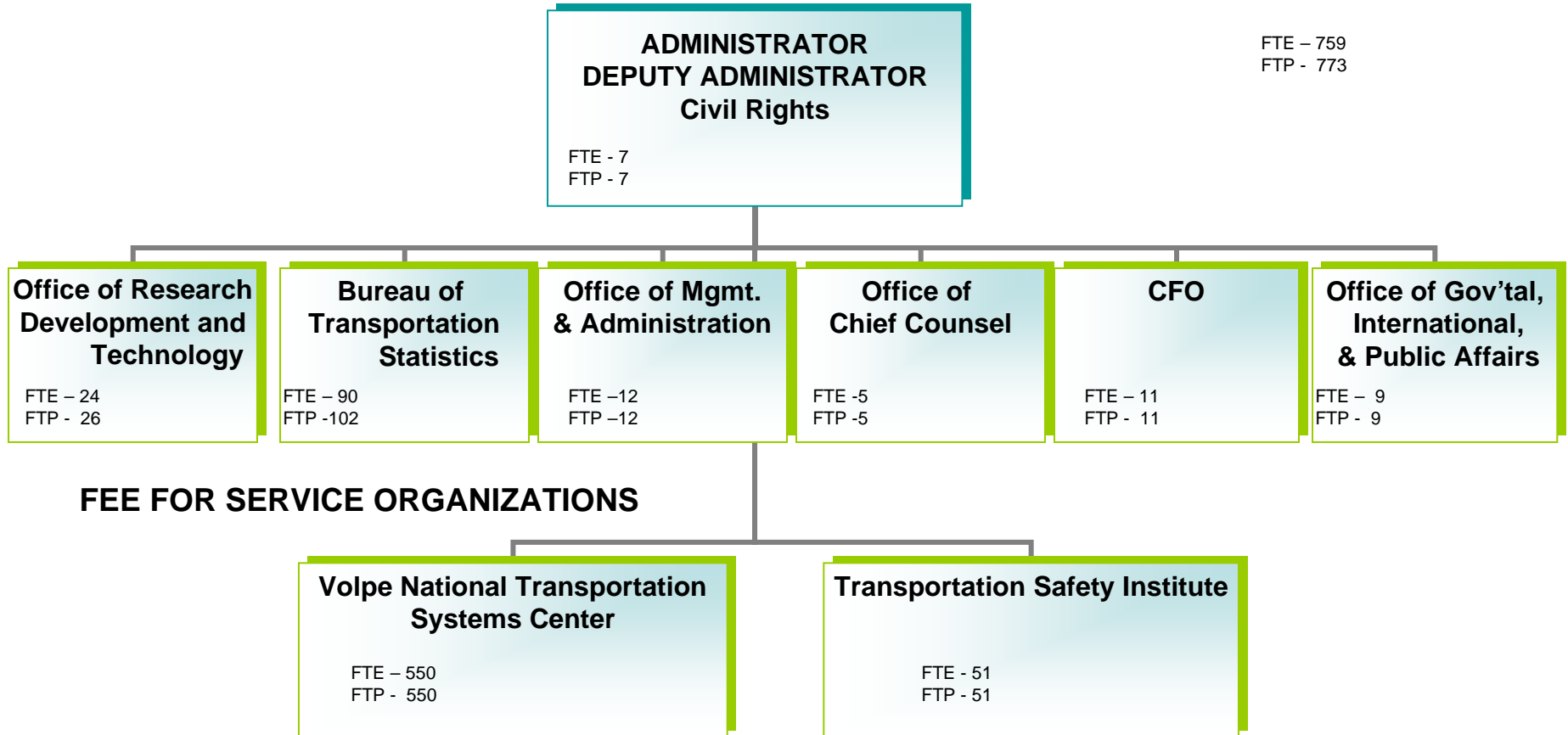
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION

FY 2007



RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION

FY 2008



Section 2:
Budget Summary Tables
Exhibits

EXHIBIT II-1
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY
Appropriations, Obligation Limitations, and Exempt Obligations
\$(000)

<u>Account Name</u>	<u>FY 2006</u> <u>Actual</u>	<u>FY 2007</u> <u>Pres. Budget</u>	<u>FY 2007</u> <u>CR</u>	<u>FY 2008</u> <u>Target</u>	<u>FY 2008</u> <u>Request</u>
Research and Development	5,716	8,217	5,693	8,217	12,000
Bureau of Transportation Statistics (HTF) 1/ 2/	<u>[26,730]</u>	<u>[27,480]</u>	<u>[26,730]</u>	<u>[27,000]</u>	<u>[27,000]</u>
TOTAL:	5,716	8,217	5,693	8,217	12,000

1/ Resources are shown as non-adds because the Bureau of Transportation Statistics is an allocation account under the Federal-aid Highway program.

2/ FY 2007 President's budget request includes \$480K from Revenue Aligned Budget Authority (RABA).

EXHIBIT II-2
FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Research and Development
Appropriations, Obligation Limitations and Exempt Obligations
(\$000)

	FY 2006	FY 2007	FY 2007	FY 2008	FY 2008	FY 2008	FY 2008	Variance
	Actual	Pres. Budget	CR	Target	Baseline Estimates	Program Changes	Request	from Target
<u>Research and Development:</u>								
Salaries and Administrative Expenses	4,606	5,247	4,662	5,247	6,295	717	5,964	717
Hazardous Materials R&D	79	0	0	0	0	0	0	0
Hydrogen Fuels Safety Research and Development	495	495	495	495	495	5	500	5
Transportation Futures and Applied Technology Program	0	2,228	0	2,228	2,228	-2,228	0	-2,228
RD&T Coordination	536	247	536	247	247	289	536	289
Nationwide Differential Global Positioning System	0	0	0	0	0	5,000	5,000	5,000
TOTAL: [Discretionary]	5,716	8,217	5,693	8,217	9,265	3,783	12,000	3,783
<u>Reimbursable Programs:</u>								
University Transportation Centers	[76,700]	[76,700]	[76,700]	[76,700]	[76,700]	[0]	[76,700]	[0]
Transportation Safety Institute	[15,000]	[17,000]	[17,000]	[17,000]	[17,000]	[0]	[17,000]	[0]
Volpe	[202,491]	[218,000]	[218,000]	[218,000]	[218,000]	[0]	[218,000]	[0]
TOTAL: [Reimbursable]	[294,191]	[311,700]	[311,700]	[311,700]	[311,700]	[0]	[311,700]	[0]

EXHIBIT II-2
FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Bureau of Transportation Statistics (Allocation Account under FHWA's Federal-Aid Highways)
Appropriations, Obligations Limitations and Exempt Obligations
(000)

	FY 2006	FY 2007	FY 2007	FY 2008	FY 2008	FY 2008	FY 2008	Variance
	Actual	Pres. Budget	FY 2007 CR	FY 2008 Target	Baseline Estimates	Program Changes	FY 2008 Request	From Target
<u>Bureau of Transportation Statistics</u>								
Travel Statistics	3,469	2,947	2,947	2,947	2,947	0	2,947	0
Freight Statistics	8,839	11,203	10,453	10,723	10,723	-480	10,723	0
Transportation Economics	1,979	1,811	1,811	1,811	1,811	0	1,811	0
Geospatial Information	1,606	1,758	1,758	1,758	1,758	0	1,758	0
Compilations, Methods and Standards	6,568	7,416	7,416	7,416	7,416	0	7,416	0
National Transportation Library	2,035	2,345	2,345	2,345	2,345	0	2,345	0
Air Transportation Statistics 1/	2,234	0	0	0	0	0	0	0
TOTAL: [Discretionary] 2/	[26,730]	[27,480]	[26,730]	[27,000]	[27,000]	[-480]	[27,000]	0
<u>Reimbursable Programs:</u>								
Air Transportation Statistics 1/	0	[4,000]	[4,000]	[4,000]	[4,000]	[219]	[4,219]	[219]

1/ In FY 2007 and 2008 the Air Transportation Statistics program is proposed to be funded by reimbursable sources. Overhead costs have been allocated to other programs.

2/ Resources are shown as non-adds because the Bureau of Transportation Statistics is an allocation account under the Federal-aid Highway program.

Exhibit II-3
FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND STRATEGIC OBJECTIVE
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
RESEARCH AND DEVELOPMENT
Appropriations, Obligation Limitations, & Exempt Obligations
(\$000)

Appropriation/Program Activity	Reduced Safety	Congestion	Global Connectivity	Environment	Security	Organizational Excellence	Total
<u>Research and Development</u>							
Hydrogen Fuels Safety Research and Development	426	0	0	426	0	0	852
Transportation Futures and Applied Technology	0	0	0	0	0	0	0
Research, Development & Technology Coordination	0	0	0	0	0	5,800	5,800
Nationwide Differential Global Positioning System	0	5,348	0	0	0	0	5,348
Total	426	5,348	0	426	0	5,800	12,000
 Total Direct FTE	 0.5	 1	 0	 0.5	 0	 34	 36

Exhibit II-3
FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND STRATEGIC OBJECTIVE
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
BUREAU OF TRANSPORTATION STATISTICS (HTF Allocation)
Appropriations, Obligation Limitations, & Exempt Obligations
(\$000)

Appropriation/Program Activity	Reduced		Global	Environment	Security	Organizational		<u>Total</u>
	Safety	Congestion	Connectivity			Excellence		
Travel Statistics	0	0	2,947	0	0	0	0	2,947
Freight Statistics	0	0	10,723	0	0	0	0	10,723
Transportation Economics	0	0	1,811	0	0	0	0	1,811
Geospatial Information	0	1,758	0	0	0	0	0	1,758
Compilations, Methods and Standards	0	0	4,945	0	0	2,471	0	7,416
National Transportation Library	0	0	0	0	0	2,345	0	2,345
TOTAL	0	1,758	20,426	0	0	4,816	0	27,000
TOTAL Direct FTE	0	7.4	76.6	0	0	19	0	103

Exhibit II-3A
FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND STRATEGIC OBJECTIVE
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Appropriations, Obligation Limitations, & Exempt Obligations
FY2008 IT Budget Request by investment and strategic objective
(\$000)

	Safety	Reduced Congestion	Global Connectivity	Environ. Stewardship	Security	Org. Excellence	Total
<u>Decision Unit: BTS</u>							
RITAX004: Intermodal Transportation Database (TranStats)							1,616
Increase reliability		776					
Reduce barriers to trade			776				
Achieve PMA						64	
RITAX005: RITA Web							2,281
Achieve PMA						2,281	
RITAX006: RITA Mission Support							2,265
Achieve PMA						2,265	
RITAX008: BTS MidTier Server/Airline Reporting & Data Information System (ARDIS)							659
Increase reliability		204					
Reduce barriers to trade			415				
Achieve PMA						40	
RITAX015: RITA Enterprise Architecture							170
Achieve PMA						170	
RITAX777: Common IT Services							2,177
Achieve PMA						2,177	
DOTXX044: International Freight Data System							640
Reduce barriers to trade			213				
Improve efficiency of freight movement			213				
Reduce congestion		214					
<u>Decision Unit: RD&T</u>							
RITAX022: Transportation Research Database							119
Achieve PMA						119	
DOTXX044: International Trade Data System (progam coordination)							200
Reduce barriers to trade			66				
Improve efficiency of freight movement			66				
Reduce congestion		67					
Total		1,261	1,749	0	0	7,116	10,127
FTEs		3.7	5.6			9.4	18.7

EXHIBIT II-4
FY 2008 BUDGET REQUEST RECAP BY ACCOUNT
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
\$(000)

<u>Accounts</u>	<u>FY 2006 Actual</u>	<u>FY 2007 Pres. Budget</u>	<u>FY 2007 CR</u>	<u>FY 2008 Target</u>	<u>FY 2008 Request</u>
Research and Development	5,716	8,217	5,693	8,217	12,000
Bureau of Transportation Statistics					
Travel Statistics	3,469	2,947	2,947	2,947	2,947
Freight Statistics	8,839	11,203	10,453	10,723	10,723
Transportation Economics	1,979	1,811	1,811	1,811	1,811
Geospatial Information	1,606	1,758	1,758	1,758	1,758
Compilations, Methods and Standards	6,568	7,416	7,416	7,416	7,416
National Transportation Library	2,035	2,345	2,345	2,345	2,345
Air Transportation Statistics 1/	<u>2,234</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total: Bureau of Transportation Statistics 2/ 3/	[26,730]	[27,480]	[26,730]	[27,000]	[27,000]
TOTAL	5,716	8,217	5,693	8,217	12,000

1/ In FY 2007 and 2008 the Air Transportation Statistics program is proposed to be funded by reimbursable sources. Overhead costs have been allocated to other programs

2/ Resources are shown as non-adds because the Bureau of Transportation Statistics is an allocation account under the Federal-aid Highway program.

3/ FY 2007 President's budget request includes \$480K from Revenue Aligned Budget Authority (RABA).

EXHIBIT II-5
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
FY 2008 BUDGET REQUEST BY ACCOUNT

Outlays
(\$000)

<u>Accounts</u>	<u>FY 2006 Actual</u>	<u>FY 2007 Pres. Budget</u>	<u>FY 2007 CR</u>	<u>FY 2008 Request</u>
Research and Development	4,883	7,967	3,619	11,369
Volpe National Transportation Systems Center	1,377	0	0	0
TOTAL:	6,260	7,967	3,619	11,369

EXHIBIT II-6
DOT RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
RESEARCH AND DEVELOPMENT
(\$000)

	2007 Request	2007 PC&B By Program	2007 # FTE Per Program	2007 Contracts Expenses	2007 Annual-ization of Pay Raise	2008 Pay Raises	GSA Rent	WCF Increase/Decrease	Inflation/Deflation	FY 2007 Adjusted Base	Program Inc/ Dec	2008 PC&B Program Increase	2008 # FTE Per Program Increase	2008 Contract Expense Program Increases	FY 2008 Request
OPERATIONS															
PERSONNEL RESOURCES (FTE)															
Direct FTE	33									33			3		36
FINANCIAL RESOURCES															
Salaries and Benefits	2,850		33		16	64				2,930	489				3,419
Travel	128								3	131					131
Training	51								1	52					52
GSA Rent	445								10	455	95				550
Other Services:															
-WCF	903								20	923					923
- Common Services	760								17	777					777
Equipment	69								2	71					71
Supplies	41									41					41
Admin Subtotal	5,247				16	64	0	0	53	5,380	584				5,964
PROGRAMS															
Research and Development Program															
Hydrogen Fuels Safety R&D	495									495	5			0	500
Transportation Futures and Applied Technology Program	2,228									2,228	-2,228				0
RD&T Coordination	247									247	289				536
NDGPS	0									0	5,000			0	5,000
Programs Subtotal	2,970				0	0	0	0	0	2,970	3,066	0		0	6,036
GRAND TOTAL	8,217				16	64	0	0	53	8,350	3,650	0			12,000

EXHIBIT II-6
DOT RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
BUREAU OF TRANSPORTATION STATISTICS (Highway Trust Fund Allocation)
(\$000)

	2007 Pres. Budget	2007 PC&B By Program	2007 # FTE Per Program	2007 Contracts Expenses	2007 Annualization of Pay Raise	2008 Pay Raises	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2007 Adjusted Base	Program Inc/ Dec	2008 PC&B Program Increase	2008 # FTE Per Program Increase	2007 Contract Expense Program Increases	FY 2008 Request
OPERATIONS			Note Non-Add											Note Non-Add	
PERSONNEL RESOURCES (FTE)	103														
Direct FTE	103									103					103
FINANCIAL RESOURCES															
Salaries and Benefits	13,447	6,789	52		74	303				13,824					13,824
Travel	110								2	112					112
Training	65								1	66					66
GSA Rent	1,810								40	1,850	230				2,080
Other Services:															0
-WCF	3,365								74	3,439	397				3,836
- Common Services	1,092								24	1,116	276				1,392
Supplies	367								8	375					375
Admin Subtotal	20,256	6,789	52		74	303	0	0	149	20,782	903				21,685
PROGRAMS															
Travel Statistics	0	1,044	8							0					0
Freight Statistics	5,072	1,567	12							5,072	-1,507				3,565
Transportation Economics	0	783	6							0					0
Geospatial Information	261	653	5							261	-61				200
Compilations, Methods and Standards	1,387	1,958	15							1,387	-287				1,100
National Transportation Library	504	653	5							504	-54				450
Air Transportation Statistics	0									0					0
Programs Subtotal	7,224	6,658	51							7,224	-1,909				5,315
GRAND TOTAL	27,480	13,447	103		74	303	0	0	149	28,006	-1,006				27,000

EXHIBIT II-7
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
PERSONNEL RESOURCE - SUMMARY
TOTAL FULL-TIME EQUIVALENTS

	<u>FY 2006 Actual</u>	<u>FY 2007 Pres. Budget</u>	<u>FY 2007 CR</u>	<u>FY 2008 Request</u>
<u>Direct Funded by Appropriation</u>				
Research and Development	21	33	23	36
Bureau of Transportation Statistics	103	103	122	103
Total Direct FTE	<u>124</u>	<u>136</u>	<u>145</u>	<u>139</u>
<u>Reimbursements/Allocations/Other</u>				
Volpe National Transportation Systems Center	507	550	550	550
Research and Development:				
Transportation Safety Institute	41	49	49	51
Bureau of Transportation Statistics:				
Air Transportation Statistics	0	19	0	19
Total Reimbursable FTE	<u>548</u>	<u>618</u>	<u>599</u>	<u>620</u>
TOTAL FTEs	672	754	744	759

EXHIBIT II-9
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
PERSONNEL RESOURCE - SUMMARY
TOTAL FULL-TIME PERMANENT POSITIONS

	FY 2006	FY 2007	FY 2007	FY 2008
	Actual	Pres. Budget	CR	Request
<u>Direct Funded by Appropriation</u>				
Research and Development	28	33	33	36
Bureau of Transportation Statistics	136	117	136	117
Total Direct FTP	164	150	169	153
<u>Reimbursements/Allocations/Other</u>				
Volpe National Transportation Systems Center	550	550	550	550
Research and Development:				
Transportation Safety Institute	49	49	49	51
Bureau of Transportation Statistics:				
Air Transportation Statistics	0	19	0	19
Total Reimbursable	599	618	599	620
TOTAL Positions	763	768	768	773

Section 3:
Budget Request
by Appropriation Account
Exhibits and Narrative Justification

RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION

Research and Development

For necessary expenses of the Research and Innovative Technology Administration, \$12,000,000, of which \$6,036,000 shall remain available until September 30, 2010: Provided, That there may be credited to this appropriation, to be available until expended, funds received from States, counties, municipalities, other public authorities, and private sources for expenses incurred for training.

Note. — A regular 2007 appropriation for this account had not been enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 109-289, Division B, as amended). The amounts included for 2007 in this budget reflect the levels provided by the continuing resolution.

EXHIBIT III-1
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Appropriations Summary by Program Activity
Research and Development
(\$000)

	FY 2006	FY 2007	FY 2007	FY 2008	FY 2008	Change
	Actual	Pres. Bud.	CR	Target	Request	FY 2007-2008
<u>Research and Development</u>						
Salaries and Administrative Expenses	4,606	5,247	4,662	5,247	5,964	717
Hazardous Materials R&D	79	0	0	0	0	0
Hydrogen Fuels Safety Research & Development	495	495	495	495	500	5
Transportation Futures & Applied Technology Program	0	2,228	0	2,228	0	-2,228
RD&T Coordination	536	247	536	247	536	289
Nationwide Differential Global Positioning System	0	0	0	0	5,000	5,000
TOTAL	5,716	8,217	5,693	8,217	12,000	3,783
FTEs						
Direct Funded	21	33	23	33	36	3
Reimbursable						
Volpe National Transportation Systems Center	507	550	550	550	550	0
Transportation Safety Institute	41	49	49	49	51	2

EXHIBIT III-2
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
RESEARCH AND DEVELOPMENT
SUMMARY ANALYSIS OF CHANGE FROM FY 2007 TO FY 2008
Appropriations, Obligations, Limitations and Exempt Obligations
(\$000)

Item	Change from FY 2007 to FY 2008	FY 2008 PC&B by Program	FY 2008 FTEs by Program	FY 2008 Contract Expenses	Appropriation Total
FY 2007 Base					\$8,217
Adjustments to Base					
2007 Pay Raise Annualization (2.2%)	16				
2008 Pay Raise (3%)	64				
Inflation	53	--	--	--	--
Subtotal, Adjustments to Base	133				
New or Expanded Programs					
Salaries & Admin Expenses	584	5,964	36	0	\$5,964
Hydrogen Fuels Safety R&D	5			500	500
Transportation Futures & Applied Technology	(2,228)	0	0	0	0
RD&T Coordination	289	0	0	536	536
Nationwide Differential Global Positioning System (NDGPS)	5,000	0	0	5,000	5,000
Subtotal, New or Expanded Program Increases/Decreases	3,650	5,964	36	6,036	12,000
Total FY 2008 Request	12,000	5,964	36	6,036	12,000

RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION

Research and Development Program and Performance

The Research and Innovative Technology Administration (RITA) was established as an administration within the Department of Transportation to provide strategic clarity to the Department's multi-modal and intermodal research efforts, while coordinating the multifaceted research agenda of the Department.

Coordination and advancement of research and development activities is led by the RITA Office of Research, Development and Technology and is funded through the General Fund. RITA also coordinates and reviews the following programs and activities: the Volpe Center that services many of the research, development, and technology needs of the Department's operating administrations on a fee-for-service basis; University Transportation Centers and Intelligent Transportation Systems programs that provide reimbursable services and the Transportation Safety Institute that provides training in a variety of transportation safety topics on a fee-for-service basis.

The Bureau of Transportation Statistics (BTS) is funded by an allocation from Federal Highway Administration's Federal-Aid Highway account. BTS compiles, analyzes, and makes accessible information on the Nation's transportation systems; collects information on intermodal transportation and other areas as needed; and enhances the quality and effectiveness of the statistical programs of the Department of Transportation through research, the development of guidelines, and the promotion of improvements in data acquisition and use.

RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
RESEARCH AND DEVELOPMENT
PROGRAM AND FINANCING
(in thousands of dollars)

Identification code 69-1730-0

		FY 2006	FY 2007	FY 2008
		<u>Actual</u>	<u>CR</u>	<u>Request</u>
Obligations by Program Activity				
0001	Salaries and Administrative Expenses	4,554	4,606	5,964
0002	Hydrogen materials R&D	0	931	500
0003	RD&T Coordination	382	915	536
0004	Nationwide Differential Global Positioning System	<u>0</u>	<u>0</u>	<u>5,000</u>
0100	Direct Program by Activities - Subtotal (running)	<u>5,637</u>	<u>6,452</u>	<u>12,000</u>
0901	University Transportation Center	61,000	77,000	77,000
0902	Transportation Safety Institute	14,000	17,000	17,000
0903	Other Programs	<u>12,000</u>	<u>32,000</u>	<u>32,000</u>
0909	Reimbursable program - subtotal line	<u>87,000</u>	<u>126,000</u>	<u>126,000</u>
1000	Total new obligations	92,637	132,452	138,000
Budgetary resources available for obligation				
2140	Unobligated balance - start of year	736	759	0
2200	New budget authority (gross)	92,528	131,693	138,000
2210	Resources available from recoveries of prior year obligations	<u>112</u>	<u>0</u>	<u>0</u>
2390	Total budgetary resources available for obligation	93,376	132,452	138,000
2395	Total new obligations	-92,561	-132,452	-138,000
2398	Unobligated balance expiring or withdrawn	<u>-56</u>	<u>0</u>	<u>0</u>
2440	Unobligated Balance - End of year	759	0	0
New Budget Authority (gross), detail:				
Discretionary:				
4000	Appropriation	5,774	5,693	12,000
4035	Appropriation permanently reduced	<u>-58</u>	<u>0</u>	<u>0</u>
4300	Appropriation (total discretionary)	5,716	5,693	12,000
Discretionary				
6800	Offsetting collections: cash	13,511	126,000	126,000
6810	Change in orders on hand from federal sources	<u>73,301</u>	<u>0</u>	<u>0</u>
6890	Spending auth from offsetting collections (total)	86,812	126,000	126,000
7000	Total new budget authority (gross)	92,528	131,693	138,000
Changes in obligated balances:				
7240	Obligated balance, start of year	-2,614	-2,263	569
7310	Total new obligations	92,561	132,452	138,000
7320	Total Outlays (Gross)	-47,295	-129,619	-137,369
7340	Adjustments in expired accounts (net)	-5,247	0	0
7345	Recoveries of prior year obligations	-112	0	0
7400	Change in uncollected customer payments (unexpired)	-73,301	0	0
7410	Change in uncollected customer payments (expired)	<u>33,745</u>	<u>0</u>	<u>0</u>
7440	Obligated balance, end of year	-2,263	570	1,200
Outlays (gross), detail				
8690	Outlays from new permanent authority	46,000	131,124	136,800
8693	Outlays from permanent balances	<u>1,295</u>	<u>-1,504</u>	<u>569</u>
8700	Outlays (Gross)	47,295	129,620	137,369
Offsets				
8800	Federal funds	42,412	126,000	126,000
8895	Non-federal funds	73,301	0	0
8896	Total offsetting collections	-28,902	0	0
Net budget authority outlays				
8900	Budget Authority (net)	5,716	5,693	12,000
9000	Outlays (net)	4,883	3,619	11,369

**RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
RESEARCH AND DEVELOPMENT
OBJECT CLASSIFICATION**

		FY 2006	FY 2007	FY 2008
		Actual	CR	Request
Direct Obligations:				
Personnel compensation:				
1111	Full-time permanent	1,724	2,246	2,368
1115	Other personnel compensation	291	325	401
	Total Personnel Compensation	2,015	2,571	2,769
1121	Civilian Personnel benefits	542	474	745
1210	Travel and Transportation of persons	88	100	131
1231	Rent to GSA	438	350	455
1251	Advisory and Assistance services	51	127	271
1252	Other Services	2,456	1,444	5,217
1253	Other purchases of goods and services from gov't accounts	-	1,300	2,300
1260	Office Supplies	9	32	41
1310	Equipment	38	54	71
1990	Subtotal, direct obligations	5,637	6,452	12,000
2990	Reimbursable obligations	86,923	126,000	126,000
9999	Total obligations	92,560	132,452	138,000

Employment Summary:

Direct:				
1001	Civilian Full-time Equivalent Employment	21	23	36
Reimbursable:				
2001	Civilian Full-time Equivalent Employment	41	49	51
Allocation account:				
3001	Civilian Full-time Equivalent Employment	103	122	103

RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
RESEARCH AND DEVELOPMENT
Funding History
Dollars in Thousands

<u>Year</u>	<u>Requested</u>	<u>Enacted</u>
2005	0	4,213 ^{1/}
2006	6,274	5,716 ^{2/}
2007	8,217	-
2008	12,000	-

1/ Total FY 2005 enacted level for R&D was \$5,967,359; \$4,310,000 reflects the amount transferred to RITA. Previous funding for R&D appeared in the Research and Special Programs budget.

2/ FY 2006 reflects a 1% across the board rescission of \$58,000 as stated in P.L. 109-148, section 3801.

Detailed Justification for Salaries and Administrative Expenses

FY 2008 Request: \$5,964,000

FTE: 36 (+3)

Overview:

The Research and Innovative Technology Administration (RITA) was established by the Norman Y. Mineta Research and Special Programs Improvement Act, November 2004. The component functions transferred into RITA were the following: the Bureau of Transportation Statistics, the Transportation Safety Institute, the Volpe Center, the Office of Innovation, Research and Education (formerly in RSPA) and staff from the Office of Intermodalism (formerly in OST Policy).

FY 2007 Base:

Base funding for salaries and administrative expenses provides for 33 FTE: the FTE mix consists of overhead staff supporting the RITA administrative functions, as well as direct program staff supporting the office of Research, Development and Technology (RD&T). In addition, funding provides for administrative expenses, including travel, training, rent, working capital, IT support and E-government initiatives.

Anticipated FY 2007 Accomplishments:

RITA's accomplishments will include meeting the goals associated with the President's Management Agenda in the areas of Budget and Performance Integration, Human Capital, Competitive Sourcing, E-government, Improved Financial Management and Research and Development.

E-Government

RITA supports the following E-Government initiatives through a Department-wide distribution based on a specified algorithm. The RITA contribution to E-Government in FY 2007 is \$30,670. The contribution supports the following Department-wide initiatives: Business Gateway, \$7,043; E-Rulemaking, \$428; Integrated Acquisition, \$12,224; Grants.gov, \$126; LOB:FM, \$3,525; LOB: Grants, \$12; LOB:HRM, \$1,688; GovBenefits, \$2,822; LOB: Geo Spatial, \$2,254; and IT Infrastructure, \$548.

The overall benefit provided from these E-Government initiatives is more efficient RITA-wide business process improvements. The E-Government initiatives serve citizens, businesses, and federal employees by delivering high quality services more efficiently and at a lower price. Instead of expensive "stove-piped" operations, agencies work together to develop common solutions which achieve mission requirements at a reduced cost, thereby making resources available for higher priority needs.

FY 2008 Budget Request:

In addition to our base FTE level of 33, RITA requests 3 additional FTE for a total of 36 FTE: 1 FTE to manage the Nationwide Differential Global Positioning System (NDGPS) Program, proposed for transfer to RITA in FY 2008; and 2 FTE to support the RD&T Coordination program.

+1 FTE: This FTE will manage the NDGPS program that currently resides in the Federal Railroad Administration. In FY 2008 the Department proposes to transfer the NDGPS program to RITA.

+2 FTE: – The requested FTE will support the RD&T Coordination Program.

- 1 FTE will be focused on conducting technical assessments of modal research programs of national interest, such as Global Positioning System (GPS) Augmentation, Digital Short-Range Communications, and electronic manifesting and Radio Frequency Identification (RFID) technologies.
- 1 FTE will focus on DOT efforts to identify program redundancies and support emerging cross-modal research priorities, such as congestion reduction, human automation interaction, machine safety performance, alternative fuels and energy efficiency. In addition, this resource will assist with deployment to support intermodal and interagency teams in areas such as alternative fuels and multi-modal congestion.

E-Government

RITA supports the following E-Government initiatives through a Department-wide distribution based on a specified algorithm. The RITA contribution to E-Government in FY 2008 is \$60,664. The contribution supports the following Department-wide initiatives: Business Gateway, \$6,843; E-Authentication, \$25,824; E-Rulemaking, \$357; Integrated Acquisition, \$12,224; GovBenefits, \$5; LOB: Geo Spatial, \$10,043; Grants.gov, \$105; LOB: FM, \$3,523; LOB: Grants, \$10; LOB: HRM, \$1,688; LOB: Case Mgmt, \$10; LOB: Budget Formulation and Execution, \$10; LOB: IT Security, \$10; and LOB: IT Infrastructure, \$10.

The overall benefit provided from these E-Government initiatives is more efficient RITA-wide business process improvements. The E-Government initiatives serve citizens, businesses, and federal employees by delivering high quality services more efficiently and at a lower price. Instead of expensive “stove-piped” operations, agencies work together to develop common solutions which achieve mission requirements at a reduced cost, thereby making resources available for higher priority needs.

Explanation of Funding Changes for Salaries and Administrative Expenses

Amount: +\$717,000

Funding provides for 36 FTE to support the Research and Development account, an increase of 3 FTE over the FY 2007 base program. This funding increase provides for the FY 2007 annualization of pay raise (2.2%; \$16,000); FY 2008 pay raise (3.0%; \$64,000); inflation (2.0%; \$53,000) and cost increase to rent (\$95,000) and support of 3 FTE (\$489,000) for NDGPS and RD&T Coordination programs.

Detailed Justification for Hydrogen Fuels Safety Research and Development

FY 2008 Request: \$500,000

Overview:

RITA was created by Congress with the primary objective of serving as the Department's focal point for coordination of crosscutting research and clearing the pathway to technology deployment. To fulfill its role as Department of Transportation's lead agency in support of the Administration's Hydrogen Fuels Initiative, RITA will continue to coordinate, manage and execute key components of the Department's hydrogen activities. Many of these activities will be conducted in collaboration with DOT, Federal, State, academic, and industry partners.

FY 2007 Base:

The requested funding level for RITA's Hydrogen program was \$495,000.

FY 2007 Accomplishments:

- Complete FY 2007 Hydrogen Executive Leadership Panel deliverables including the first Hydrogen and Fuel Cell Emergency Response training and education program and begin distribution with the National Association of State Fire Marshals.
- Complete hydrogen infrastructure analysis study and continue collaboration on other hydrogen pathways projects under the UC Davis led partnership.
- Develop FY 2008 Hydrogen budget priorities for inclusion in the Department's FY 2008 budget guidance to all DOT Operating Administrations.
- Review FY 2008 RD&T Hydrogen budget requests to ensure alignment with DOT Strategic objectives and priorities.
- Complete the first Phase of Hydrogen Materials Compatibility Research with Sandia National Laboratories.
- Facilitate and manage multimodal transportation-related Hydrogen and related research and partnership activities in support of the Department's Hydrogen program.
- Manage Hydrogen and advanced propulsion and alternative fuel projects under SAFETEA-LU.

- Identify opportunities for cross cutting and multi-modal research within DOT.
- Continue efforts in support of the President's Hydrogen Initiative including participation in National and international R&D partnerships.
- RITA will continue to maintain and revise, and update the DOT and Federal Hydrogen Portal.
- Depending on Funding availability, RITA will initiate targeted research aimed at addressing near-term gaps identified in the independent DOT safety gap analysis study completed in FY 2006. The gaps relate to technology development and validation of hydrogen transport and storage.

FY 2008 Budget Request:

- Funding will enable RITA to continue the progress made in FY 2007. The programs enumerated in the proposal are directly in line with RITA's mission and objectives to coordinate and lead multi-modal research. Each program has broad reaching benefit to multiple operating administrations within DOT. The proposal also responds to direct stakeholder and industry needs in advancing the Hydrogen economy.
- RITA will continue to conduct materials compatibility research and Sandia National laboratory for design and operations guidelines for hydrogen delivery and transport systems including pipeline, pressure vessels, and fuel storage systems.
- RITA will conduct targeted research aimed at addressing near-term gaps identified in the independent DOT safety gap analysis study completed in FY 2006. The gaps relate to technology development and validation of hydrogen transport and storage.
- RITA will continue involvement in domestic and international partnerships, code and standards development organizations to develop safety codes, standards, and regulations and, projects and activities to ensure the safety of hydrogen transportation.
- RITA will continue its partnership with the National Association of State Fire Marshals to conduct and execute the Hydrogen Executive Leadership Panel (HELP) and continue the national program to educate and train the state and local public safety officials and first responders. This program works to ensure the safety of communities using or near hydrogen pipelines, infrastructure, and vehicles by improving the fire and first responder service's ability to respond to incidents and provide guidance and education to local officials engaged in codes and standards development, implementation, and enforcement. In FY 2008, DOT and HELP will continue to refine a hydrogen safety training program for

firefighters and first responders and continue to disseminate their train the trainer and general information packages. HELP will continue to expand its national outreach program to promote awareness of hydrogen transportation safety. HELP will also continue to develop recommended practices and provide input into related consensus codes and standards.

- RITA will conduct research to develop, evaluate, and validate under real world conditions non-destructive testing and other safety and inspection technologies that will facilitate the reliable and safe operation of components of the hydrogen transportation system.
- RITA will continue to support collaborative demonstration efforts for hydrogen stations, vehicles, and infrastructure with federal, state, local, industry, and academia partners. These demonstrations will focus on evaluating real world real use operational scenarios and validation.
- RITA will continue to maintain national and DOT hydrogen websites.
- RITA will also continue to execute individual projects and participate in collaborative efforts including the UC Davis Hydrogen pathways program that analyze or advance the hydrogen initiative and facilitate an effective transition to the hydrogen economy.

Explanation of Funding Changes for Hydrogen Fuels Safety R&D

Amount: \$5,000

The increase is due to a reallocation of funding within the R&D account.

Detailed Justification for Transportation Futures and Applied Technology Program

FY 2008 Request: \$0

Overview:

The Transportation Futures Program is essential for enabling RITA to meet its Mineta Act mandate from Congress (PL 108-426), and is the next stage in the evolution of the Research, Development and Technology (RD&T) planning process established in FYs 2005 and 2006. RITA has successfully institutionalized a process for coordinating, budget and program planning, and reviewing RD&T programs across the Department. The Transportation Futures Program will add value to this process by adding the technical and analytical capabilities required to transform the RD&T Planning and Management function into that envisioned by the Congress and by the Secretary.

RITA's unique role within DOT is to bring a cross-modal framework to modal research programs -- providing the technical assessments necessary for the Department to improve decision-making and policy-setting processes, eliminating program redundancies, and developing a long-range, multimodal roadmap for effective RD&T investment.

FY 2007 Base:

The **Transportation Futures Program** is a new line item in the RITA budget. The program expands upon activities formerly under the RD&T Coordination line.

Anticipated FY 2007 Accomplishments

This new program builds upon the work accomplished in FY 2006 in the RD&T Coordination program. Under RD&T Coordination, RITA is developing the five-year transportation RD&T strategic plan, and conducting RD&T annual program reviews and RD&T budget and performance planning.

FY 2008 Budget Request

\$0

In FY 2008, the Transportation Futures Program is being combined with the RD&T Coordination Program and thus, renamed. The Transportation Futures Program was intended to help RITA meet its Mineta Act mission by providing the technical and analytical capabilities required to transform the RD&T planning and management function into that envisioned by the Secretary and Congress and will continue under the RD&T Coordination budget line item.

Detailed Justification for Research, Development and Technology Coordination

FY 2008 Request: \$536,000

Overview:

RITA was created by Congress with the primary objective of serving as the Department's focal point for coordinating, facilitating and reviewing crosscutting and cross-modal research, and for enabling new technology deployment across all modes. To fulfill this role, RITA provides strategic direction to and coordinates the Department's research programs through annual program reviews, budget and performance planning and prioritization, and performance tracking and reporting.

In response to the Government Accountability Office's (GAO) 2006 recommendations, in FY 2008 RITA will improve Departmental RD&T coordination by:

- Completing a strategy for reviewing all DOT RD&T activities to identify opportunities for joint efforts across Operating Administrations;
- Ensuring that DOT research is evaluated according to established best practices;
- Preparing and reporting on a schedule of research program evaluations; and
- Developing common performance measures for DOT RD&T activities.

FY 2007 Base:

The base funding in FY 2007 for the RD&T Coordination program is \$247,500. RITA will continue to lead the RD&T Planning Council and Team to identify research priorities and opportunities for collaboration on crosscutting RD&T.

FY 2007 Accomplishments:

In direct support of the DOT Organizational Excellence strategic objective, RITA managed RD&T coordination through the RD&T Planning Council and Team (per DOT Order 1120.39A) to promote the efficient use of DOT RD&T funds, prevent duplication and encourage joint RD&T efforts. In FY 2007, the following accomplishments are planned:

1. Framework for a Web-based database of DOT RD&T projects.
2. Develop common performance measures for RD&T activities.
3. Engage external stakeholders in identifying emerging research priorities.
4. Provide staff support to the RD&T Planning Council and RD&T Planning Team and other crossmodal working groups.

5. Strengthen RD&T coordination and reviews, including:
 - Providing recommendations to the Secretary on strategic RD&T priorities.
 - Preparing the FY 2009 RD&T budget priorities for inclusion in the Department's FY 2009 budget guidance.
 - Reviewing FY 2009 RD&T budget requests to ensure alignment with DOT strategic objectives and priorities.
 - Conducting annual RD&T program reviews.
 - Preparing the RD&T Funding Report to Congress (SAFETEA-LU, sec. 5208).

FY 2008 Budget Request:

The proposed FY 2008 activities will enhance Department-wide coordination by focusing DOT's efforts to increase evaluation and measurement activity and engage internal and external stakeholders. These activities will enable RITA to recognize unnecessary duplication and help identify the Department's best opportunities for concentrating research efforts to gain the best investment. In addition to ongoing planning and coordination activities, such as the Annual Report to Congress, staff support to the Planning Council, updates to the strategic plan, budget guidance, budget reviews, and program reviews, RITA will initiate or enhance the following in FY 2008:

1. Further develop the Web-based data tracking system for research coordination started in FY 2007.
2. Conduct one stakeholder workshop on crossmodal research priorities or emerging technologies as part of a strategic update to the current RD&T Strategic Plan.
3. Develop and implement tools and a performance management system that monitors DOT's R&D portfolio and collects data about its management and progress.
4. Conduct cost-benefit analysis and return-on-investment analysis on key segments of DOT's research agenda and targeted technologies.
5. Perform assessments to determine DOT's most promising technologies.

Explanation of Funding Changes for RD&T Coordination Amount: +\$289,000

The funding increase will provide for an enhancement of Department-wide coordination efforts to increase evaluation and measurement activities and engage internal and external stakeholders. These activities will enable RITA to recognize unnecessary duplication and help identify the Department's best opportunities for concentrating research efforts to gain the best investment.

Detailed Justification for Nationwide Differential Global Positioning System (NDGPS) Program

FY 2008 Request: \$5,000,000

Overview:

Among current U.S. positioning, navigation and timing (PNT) systems, the Nationwide Differential Global Positioning System (NDGPS) is an enabling technology for civil, commercial and scientific applications. Fifty nations have followed the U.S. lead by building compatible NDGPS systems. This is a mark of success of the National Space-Based PNT policy for promoting the use of GPS, GPS augmentation systems such as NDGPS, and PNT-based civil, commercial and scientific applications worldwide.

DOT, in cooperation with the U.S. Coast Guard (USCG), the U.S. Air Force, the U.S. Army Corps of Engineers, and the National Oceanic and Atmospheric Administration (NOAA), has partially deployed and operates the NDGPS service in the U.S. NDGPS provides accurate dynamic navigation information to users with one-to-two meter accuracy. As the accuracy of GPS has improved, particularly through removal of Selective Availability, the operational need for NDGPS has diminished.

Despite DOT program responsibilities for NDGPS, there are no current validated transportation systems requirements for NDGPS. The majority of current NDGPS users appear to be primarily in the resources management community (e.g., agriculture, surveying, forestry). While some potential future transportation applications have identified a High Performance NDGPS capability as a possible enabling technology solution for high accuracy (decimeter level) operational requirements, notably in Intelligent Transportation Systems (ITS) applications, these requirements, and the application deployments, are uncertain.

The government has invested \$53.7 million to date for NDGPS (not including in-kind contributions of land and equipment from federal and state partners). This investment needs to be preserved while assessments of inland requirements for NDGPS are completed, and options for meeting the high accuracy PNT requirements of future transportation applications are evaluated. These activities will be evaluated in conjunction with the National PNT Architecture effort to determine to what extent the NDGPS infrastructure can meet user needs as part of a national PNT architecture, before any decision on the future maintenance, operation or enhancement of the system is made.

Need for the Civil PNT Architecture Program:

Reliable PNT services are essential elements of the national transportation critical infrastructure, and involve multiple technologies that support multi-modal systems safety operations requirements and other applications. The U.S. Space-Based PNT Policy states that the U.S. must continue to improve and maintain GPS, GPS augmentation, and back-

up PNT capabilities to meet constantly increasing national, homeland, and economic security requirements, as well as operational missions of the broader civil, commercial, and scientific communities.

The National Space Policy Directive (NSPD-39) identifies DOT as the focal point for representing and assuring civil GPS requirements. However, DOT faces significant challenges in harmonizing and coordinating systems requirements and research for improved use of PNT services, development of augmentation systems, and assurance of PNT systems back-ups. Without a management structure to coordinate research and systems assessment activities, there is risk of duplicated efforts and misapplied resources.

In order to avoid PNT solutions developed for individual user applications, the Under Secretary of Transportation requested that RITA lead DOT's efforts in the development of the National PNT Architecture on behalf of the civil community. Development of the national PNT architecture will require a coordinated approach from all sectors of the civil community to determine the most efficient and effective mix of systems to meet future civil user PNT requirements. The architecture effort involves close coordination with the other civil departments and agencies and, in particular, with Office of the Secretary's Office of Navigation and Spectrum Policy for policy decisions that result from the systems architecture study.

The system engineering activities performed in development of the National PNT Architecture will determine the best method to meet the future high performance PNT needs of the transportation community, including back-up systems, and identify the potential role of NDGPS as part of this national architecture.

FY 2007 Base:

The funding base in FY 2007 for the NDGPS Program, in the Federal Railroad Administration (FRA) budget request, was \$0. The Department decided to carry forward FY 2006 funding to manage FY 2007 NDGPS operations and maintenance expenses of the NDGPS sites at a low level to preserve the government investment in the system, while assessing the new responsibilities assigned to the Department by the U.S. Space-Based PNT Policy, including current and potential future NDGPS requirements.

Anticipated FY 2007 Accomplishments:

RITA and FRA will coordinate continued delivery of NDGPS user services, through a Memorandum of Agreement with the USCG, but will not expand the system or otherwise pursue system buildout. On behalf of DOT, RITA will coordinate completion of the technical assessment for the need for the inland component of NDGPS, including assessing interagency system requirements and seeking validated transportation requirements. From this assessment, policy determinations will be made about continuing, mothballing, or decommissioning NDGPS.

A PNT system engineering analysis will be initiated to address the best methods to meet civil PNT requirements. This analysis will be performed in conjunction with the development of a National PNT Architecture that will determine the future role of NDGPS as part of this architecture.

FY 2008 Budget Request:

The funding and program management responsibility for the NDGPS Program resided in the FRA budget through FY 2007. RITA has agreed with FRA to coordinate the NDGPS requirements assessment and NDGPS operations in FY 2007. If funding is received in FY 2008 to continue NDGPS operations, and a policy determination made to continue NDGPS, then NDGPS program management will be transferred from FRA to RITA.

In FY 2008, RITA will fund NDGPS operation and maintenance of existing NDGPS sites through a Memorandum of Agreement with the U.S. Coast Guard (USCG) to preserve the government investment in this system, and to support current NDGPS system users. No construction or new equipment installation for NDGPS will be pursued, pending the results of the NDGPS assessment and follow-on decisions.

RITA will perform system engineering activities in support of developing the National PNT Architecture that will determine the best method to meet the high performance PNT needs of the transportation community, and to identify the future role of NDGPS as part of this national architecture.

NDGPS Operations and Maintenance (O&M)

Task	Cost
Atlantic Support Manager O&M	\$2,270,582
Pacific Support Manager O&M	\$101,650
Systems Management	\$1,010,000
Navigation Center (NAVCEN)	\$200,000
National Geodetic Survey (CORS)	\$381,717
NOAA Earth System Research Laboratory	\$295,623
Parts Support/Depot Level Repair	\$25,000
Emergency/Operational Contingency	\$315,428
Total NDGPS Operations and Maintenance	\$4,600,000

PNT Architecture System Engineering

Task	Cost
Civil User Needs Evaluation	\$125,000
PNT Civil Technology Assessment	\$175,000
Future Civil Environment Definition	\$100,000
Total PNT Architecture System Engineering	\$400,000

Explanation of Funding Changes for NDGPS Program Amount: +\$5,000,000:

Summary	Cost
Total NDGPS Operations and Maintenance	\$4,600,000
Total PNT Architecture System Engineering	\$400,000
Total Requested	\$5,000,000

The increase in funding reflects a Departmental decision in the FY 2007 budget request to reschedule FY 2006 program funding across two fiscal years, and to continue this function in FY 2008 by transferring the NDGPS program from FRA to RITA (pending funding availability and decision to continue operations). The cost to operate and maintain the NDGPS sites in a “preservation of investment” state is \$4,600,000; this budget assumes no expansion or construction activities. System engineering work on development of a national PNT architecture to support future high performance transportation PNT requirements is \$400,000.

RESEARCH AND DEVELOPMENT

Reimbursable Programs

University Transportation Center (UTC)

Funding Level: \$76,700,000

Authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the University Transportation Centers (UTC) Program advances U.S. technology and expertise in the many disciplines comprising transportation through the mechanisms of education, research and technology transfer at university-based centers of excellence.

The UTC Program is a Congressionally mandated financial-assistance program to support transportation education, research and technology transfer activities at university-based centers. Under the program, UTCs receive grant funds from DOT to educate the future transportation workforce and to conduct research to advance the field of transportation. UTC grant funds require grantees to provide a dollar-for-dollar match on the Federal funds (with the exception of eight UTCs that Congress exempted from this requirement), thus doubling DOT's investment in transportation research and education.

In FY 2006, the UTC Program awarded funding to 60 grantees. Ten were at institutions that won a 1999 open competition, ten were at institutions that won a 2002 limited competition required by TEA-21, and 40 were at institutions designated in SAFETEA-LU. The amount of each grant is specified in the UTC Program's authorizing legislation. FY 2007 funding will be awarded to the 10 Regional and 10 Tier 1 UTCs that were selected during the Congressionally mandated competition in FY 2006, as well as the 40 UTCs designated in SAFETEA-LU.

In FY 2008, RITA is directed in SAFETEA-LU to use \$76,700,000 for awards to the UTCs and to perform certain required program-coordination functions such as operating a clearinghouse for UTC research. UTC Program funding is provided to RITA through reimbursable agreements with the Federal Highway Administration and Federal Transit Administration.

Success is measured by the number of students graduating with transportation-related advanced degrees from universities funded under the UTC program.

Transportation Safety Institute (TSI)

Funding Level: \$17,000,000
FTE: 51

Transportation Safety Institute's (TSI) mission is to provide premier worldwide training, products, and/or services for people in the public and private sectors through innovative, state-of-the-art methods and technologies that contribute to the protection of life, property, and the environment

TSI was established in 1971 to assist DOT modal administrations in accomplishing their essential training requirements. Since its inception, TSI has expanded its clientele to keep up with the needs of the Department and transportation industry. The Institute offers premier transit, aviation, pipeline, motor carrier, highway safety, hazardous material, and risk management training nationally and internationally.

The TSI is funded via reimbursable agreements, tuitions, and fees. TSI is a Federal cost recovery agency that develops and conducts worldwide safety, security, and environmental training, products, and/or services for both public and private sectors. The Research and Innovative Technology Administration (RITA) is the Institute's parent organization within the Department of Transportation.

How TSI Operates

- Direction and budget oversight provided by RITA
- Funded via reimbursable agreements, tuitions, and fees
- Operational and logistical support provided by the Mike Monroney Aeronautical Center
- Associate and contract staff (industry experts) are instrumental in delivery/development of the training

Explanation of Funding Changes for TSI Planning and Management FTE: +2

Two additional reimbursable positions are requested for the TSI Director and the TSI Office Administrator. These positions were previously funded with appropriated funds and positions in RITA Headquarters.

Other RITA Reimbursable Programs

Funding Level: \$32,000,000

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorization provides funding under Title V – Research to fund National Cooperative Freight Research, Biobased Transportation Research, Commercial Remote Sensing Research, Technology Transfer Grants, Appalachian Regional Commission Grants, Rural Transportation Research Initiatives Grants, Hydrogen Powered Research Grants, Cold Region and Rural Research Grants, Advanced Vehicle

Technology Grants and Renewable Transport Systems Grants. The funding to support these initiatives is managed by RITA staff.

RITA also collects reimbursable funds to manage the Department's Climate Change Center.

Volpe National Transportation Systems Center

Program and Performance

The Working Capital Fund finances multidisciplinary research, evaluation, and analytical and related activities under the Volpe Center in Cambridge, MA. The fund is financed through negotiated agreements with the Office of the Secretary, Departmental operating administrations, and other governmental elements requiring the Center's capabilities. These agreements also define the activities undertaken at the Volpe Center.

DEPARTMENT OF TRANSPORTATION
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
WORKING CAPITAL FUND,
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER
PROGRAM AND FINANCING (in thousands of dollars)

Identification code 69-4522-0-4-407

	FY 2006 <u>Actual</u>	FY 2007 <u>CR</u>	FY 2008 <u>Estimate</u>
Obligations by Program Activity			
1000 Total Obligations	202,491	218,000	218,000
Budgetary resources available for obligation			
2140 Unobligated balance - start of year	145,249	203,210	203,210
2200 New budget authority (gross)	<u>260,452</u>	<u>218,000</u>	<u>218,000</u>
2390 Total budgetary resources available for obligation	405,701	421,210	421,210
2395 Total new obligations	(202,491)	(218,000)	(218,000)
2440 Unobligated Balance - End of year	203,210	203,210	203,210
Permanent authority: Spending authority from offsetting collections:			
5800 Offsetting collections: cash	188,679	218,000	218,000
5810 Change in orders on hand from federal sources	<u>71,773</u>	<u>-</u>	<u>-</u>
5890 Spending auth from offsetting collections (total)	260,452	218,000	218,000
Changes in unpaid obligations			
Unpaid obligations, start of year			
7240 Obligated balance: Fund Balance	(95,326)	(154,664)	(154,664)
7310 Total Obligations	202,491	218,000	218,000
7320 Total Outlays (Gross)	(190,056)	(218,000)	(218,000)
Unpaid obligations, end of year			
7400 Change in uncollected customer payments from Fed source	(71,773)		
7440 Obligated balance, end of year	(154,664)	(154,664)	(154,664)
Outlays (gross), detail			
8690 Outlays from new discretionary authority	53,823	218,000	218,000
8693 Outlays from discretionary balances	<u>136,233</u>	<u>-</u>	<u>-</u>
8700 Outlays (Gross)	190,056	218,000	218,000
Offsets			
8800 Federal funds	188,679	218,000	218,000
8895 Change in orders on hand from federal sources	<u>71,773</u>	<u>-</u>	<u>-</u>
8900 Budget Authority (net)	-	-	-
9000 Outlays (net)	1,377	-	-
9502 Unpaid obligation, end of year	102,244	-	-

**DEPARTMENT OF TRANSPORTATION
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION**

**WORKING CAPITAL FUND
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER**

Object Classification (in thousands of dollars)

Identification code 69-4522-0-4-407

Reimbursable Obligations

Obj Code	Item	FY 2006 Actual	FY 2007 CR	FY 2008 Estimate
Personnel compensation				
2111	Full-time permanent	42,738	43,000	43,000
2113	Other than full-time permanent	3,405	3,000	3,000
2115	Other personnel compensation	1,077	1,000	1,000
2119	Total personnel compensation	47,220	47,000	47,000
2121	Civilian personnel benefits	12,222	11,000	11,000
2130	Benefits for former personnel	13	30	30
2210	Travel & transportation of persons	3,815	4,450	4,450
2220	Transportation of things	169	0	0
2233	Commun, utilities & misc. charges	3,021	4,000	4,000
2240	Printing and reproduction	115	0	0
2251	Advisory and assistance services	175	0	0
2252	Other services	74,405	63,520	63,520
2253	Purch of G&S from Govt accounts	883	5,000	5,000
2254	O&M of facilities	4,387	5,000	5,000
2255	R&D Contracts	42,538	65,000	65,000
2257	O&M of equipment	4,510	1,000	1,000
2260	Supplies and materials	1,456	1,000	1,000
2310	Equipment	4,927	8,000	8,000
2320	Land and structures	2,635	3,000	3,000
9999	Total new obligations	202,491	218,000	218,000

EMPLOYMENT SUMMARY

Reimbursable:

2001	Civilian full-time equivalent employment	507	550	550
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EXHIBIT III-1
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
Appropriations Summary by Program Activity
Bureau of Transportation Statistics (Highway Trust Fund allocation)
(\$000)

	FY 2006	FY 2007	FY 2007	FY 2008	FY 2008	Change
	Actual	Pres. Bud.	CR	Target	Request	FY 2007-2008
<u>Bureau of Transportation Statistics:</u>						
Travel Statistics	3,469	2,947	2,947	2,947	2,947	0
Freight Statistics	8,839	11,203	10,453	10,723	10,723	-480
Transportation Economics	1,979	1,811	1,811	1,811	1,811	0
Geospatial Information	1,606	1,758	1,758	1,758	1,758	0
Compilations, Methods and Standards	6,568	7,416	7,416	7,416	7,416	0
National Transportation Library	2,035	2,345	2,345	2,345	2,345	0
Air Transportation Statistics 1/	2,234	0	0	0	0	0
TOTAL: [Discretionary] 2/	[26,730]	[27,480]	[26,730]	[27,000]	[27,000]	[-480]
Direct FTE	103	103	122	103	103	
Reimbursable FTE	0	19	0	19	19	

1/ In FY 2007 and FY 2008 the Air Transportation Statistics program is proposed to be funded by reimbursable source. Overhead costs have been allocated to other programs.

2/ Resources are shown as non-adds because the Bureau of Transportation Statistics is an allocation account under the Federal-aid Highway program.

Program and Performance Statement

This account provides the necessary resources to support transportation research, statistical collection and reviews and consulting services.

EXHIBIT III-2
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
BUREAU OF TRANSPORTATION STATISTICS
SUMMARY ANALYSIS OF CHANGE FROM FY 2007 TO FY 2008
(\$000)

Item	Change from FY 2007 to FY 2008	FY 2008 PC&B by Program	FY 2008 FTEs by Program	FY 2008 Contract Expenses	Appropriation Total
FY 2007 Base					27,480
Adjustments to Base					
2007 Pay Raise Annualization	74				
2008 Pay Raise (3%)	303				
Inflation	149				
Subtotal, Adjustments to Base	526				
New or Expanded Programs					
Salaries & Admin Expenses	903		52		
Travel Statistics	0	2,947	8	0	2,947
Freight Statistics	-1,507	7,158	12	3,565	10,723
Transportation Economics		1,811	6	0	1,811
Geospatial Information	-61	1,558	5	200	1,758
Compilation Methods and	-287	6,316	15	1,100	7,416
National Transportation Library	-54	1,895	5	450	2,345
Airline Transportation Statistics /1					0
Subtotal, New or Expanded Programs	-1,006	21,685	103	5,315	27,000
Total FY 2008 Request	27,000	21,685	103	5,315	27,000

1/ In FY 2007 and FY 2008 the Air Transportation Statistics program is proposed to be funded by reimbursable sources. Overhead costs have been allocated to other programs.

**RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
BUREAU OF TRANSPORTATION STATISTICS
(Allocation Account under FHWA's Federal-Aid to Highways)
OBJECT CLASSIFICATION
(In thousands of dollars)**

		<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>
		<u>Actual</u>	<u>CR</u>	<u>Request</u>
<u>Direct Obligations:</u>				
	Personnel compensation:			
1111	Full-time permanent	9,332	10,490	10,760
1115	Other personnel compensation	165	175	180
	Total Personnel Compensation	9,497	10,665	10,940
1121	Civilian Personnel benefits	2,410	2,782	2,803
1210	Travel and Transportation of persons	101	110	110
1231	Rent to GSA	1,603	1,810	2,080
1240	Printing & Production	6		
1251	Advisory and Assistance services	5,063	4,845	4,408
1252	Other Services	228	283	263
	Other purchases of goods and services			
1253	from gov't accounts	5,153	4,931	4,486
1257	Operation and maint of equipment	1,763	1,687	1,535
1260	Office Supplies	26	30	30
2310	Equipment	1,455	337	345
1990	Subtotal, direct obligations	<u>27,305</u>	<u>27,480</u>	<u>27,000</u>
1990	Reimbursable obligations	1,024	5,000	5,000
1990	Total obligations	28,329	32,480	32,000

Personnel Summary:

Direct Full-time Equivalent	103	103	103
Reimbursable Full-time Equivalent	<u>0</u>	<u>19</u>	<u>19</u>
TOTAL	103	122	122

RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
 BUREAU OF TRANSPORTATION STATISTICS
 (Allocation Account under FHWA's Federal Aid to Highways)
 10-Year Funding History
 (In thousands of dollars)

<u>Year</u>	<u>Requested</u>	<u>Enacted</u>
1998	31,000	31,000
1999	31,000	31,000
2000	31,000	31,000
2001	31,000	30,932 ^{1/}
2002	43,760	30,808 ^{2/}
2003	35,806	30,499 ^{3/}
2004	35,239	30,235 ^{4/}
2005	32,199	30,015 ^{5/}
2006	32,869	26,730 ^{6/}
2007	27,480	-
2008	27,000	-

^{1/} FY 2001 reflects a reduction of \$68,000 as stated in P.L. 106-554.

^{2/} FY 2002 reflects a reduction of \$192,000 to WCF expenses as stated in P.L. 106-554. based on an across the board rescission

^{3/} FY 2003 reflects a reduction of \$300,000 for WCF expenses (section 362) and .65% rescission of \$201,500 (section 601) of P.L. 108.7.

^{4/} FY 2004 reflects a reduction of \$581,000 for WCF expenses (section 517) and .59% across the board rescission of \$183,000 (section 168) of P.L. 180-199.

^{5/} FY 2005 reflects a reduction of \$737,000 to WCF expenses (section 197) as stated in P.L. 108-477. based on an across the board rescission.

^{6/} FY 2006 reflects a 1% across the board rescission of \$270,000 as stated in P.L. 109-148, section 3801.

Detailed Justification for Travel Statistics Program

FY 2008 Request: \$2,947,000

FTE: 14.0 [includes 4.0 overhead]

Overview:

Travel data are needed for effective Federal, State, and local transportation policy-making, planning, and program management. The Travel Statistics Program provides information on both personal and business travel as well as passenger travel facilities. Because of its skill diversity and experience, the Travel Statistics Program staff offer an invaluable level of expertise in all areas of passenger travel statistics.

Without the Travel Statistics program:

- RITA/BTS would be unable to fulfill its legislative mandate under SAFETEA-LU to develop and maintain a National Census of Ferry Operators needed by State transportation officials for resource determinations for ferry operations and infrastructure.
- U.S. Customs and Border Protection international border crossing data would not be organized and summarized for use by DOT in border state infrastructure grants allocation formulae.
- RITA/BTS could not provide the technical support to DOT modal administrations and other governmental agencies needed to improve the safety and security of transportation through projects such as the development, maintenance, and statistical analysis of a Confidential Close Call Reporting System for the Federal Railroad Administration, or by conducting targeted data collections for other agencies' key performance indicators under the OMB approved Omnibus Survey Program.
- Key transportation data gaps would not be filled, leaving Federal, State and local decision makers without the necessary information to evaluate such things as the intermodal connectivity of passenger facilities, public accessibility to transportation in rural areas, or risk exposure in transportation.
- Congestion measures on the reliability of the components of the transportation system would not be developed to assist planners in determining the impacts of congestion or in prioritizing mitigation efforts.

FY 2007 Base:

The Travel Statistics Program in FY 2007 will augment and refine the National Ferry Database (NFD), continue to organize and summarize U.S. Customs and Border Protection crossing data at the port level, produce updates of BTS' rural access studies, continue working with the Federal Railroad Administration (FRA) on the Confidential Close Call Reporting System, begin releasing data from the Passenger System Connectivity Study, and coordinate the travel community needs for data from the Census' American Community Survey.

Anticipated FY 2007 Accomplishments

- Publish the public use file for the National Ferry Database study and a summary report of findings, and augment the database with data from other sources (Coast Guard, Corps of Engineers, AASHTO) on ferry routes, vessels, and terminals.
- Publish preliminary data on the number of intermodal passenger facilities from the Passenger System Connectivity Study.
- Continue the reimbursable partnership with FRA on the Confidential Close Call Reporting System (C³RS) Demonstration Project to develop a database of observational and corporate data, and assist FRA's Human Factors Program in data collection and data analysis of behavioral-based safety studies and program evaluation data.
- Release updated data on rural access to transportation quantifying the availability of air, rail, and intercity bus services available for the rural population.
- Produce timely and relevant information on international travel, including processing and publishing monthly Border Crossing/Entry data for use in Departmental allocation formulae.
- Continue statistical data analysis to determine the impact on transportation planning data of the Census Bureau's implementation of the annual American Community Survey, which will replace the decennial long form.
- Develop statistics for the measurement of congestion in various modes of transportation.
- Develop and release reports, issue briefs, and data analyses of key travel issues such as exposure to risks of accident and injury and transportation issues faced by members of various demographic groups.
- Support user requests for data and assistance with analysis of the National Household Travel Survey, the American Travel Survey, and the Omnibus Surveys.

FY 2008 Budget Request

In FY 2008, the Travel Statistics Program will continue to provide unique services to other Federal agencies, particularly in DOT. Staff will continue to refine the National Ferry Database from the 2006 survey and begin planning for the 2008 survey of ferry operators, the next iteration of this survey required by Congress. The Confidential Close Call Reporting System—a collaborative project with the FRA—will be in its third year of data collection. Work will continue on developing statistics for the measurement of congestion and safety risk exposure. Monthly Border Crossing/Entry data will be processed and published. The Omnibus Household Survey and other targeted surveys will be conducted on an on-demand basis and results will be summarized and published on the Travel Statistics Program web page. Travel program staff will also update the rural access analysis and prepare issue briefs and reports based on the needs of the Administration and Congress on travel data issues. The program will also continue its coordination role with the Census Bureau on travel data.

IT Investment: The IT investment costs for the travel program total \$0.21 million and include 1.0 FTE, the travel portion of BTS' data warehouse (RITAX004: Intermodal Transportation Database).

Detailed Justification for Freight Statistics

FY 2008 Request: \$10,723,000

FTE: 34.0 [Includes 21.0 overhead]

Overview:

The Freight Data Program develops and compiles data and information on the movement of freight within, through, into, and from the U.S. by all modes of transportation. The program provides key freight data for the Congressionally mandated Intermodal Transportation Database under SAFETEA-LU, and meets the most commonly cited, high priority freight data needs of the Department, other federal agencies, and the transportation community. Its Commodity Flow Survey is the most comprehensive source of nationwide data on the flow of goods, the geography of freight movements, and the distance of shipments that covers all modes of transportation (including multi-modal shipments); the only source of nationwide data on domestic truck freight flows; and the sole source of national-level flow data on hazardous materials shipments by highway and air that is collected by the federal government. The program also supplies the Department with transborder freight data and border crossing data used in Congressionally specified allocation formulae for border state infrastructure grants under SAFETEA-LU. The freight data program supports the DOT strategic goals of mobility and global connectivity.

Without the data provided by the Freight Data program:

- Transborder data needed for the Border States Infrastructure Grants allocation formula required by SAFETEA-LU would be unavailable within the Department;
- There would be major gaps in national freight data and freight shipment information, especially for nationwide domestic truck freight shipments without the Commodity Flow Survey;
- There would no longer be a federal source for nationwide hazardous materials flow data for truck and aviation modes without the Commodity Flow Survey;
- Base data from the Commodity Flow Survey for 2007 would be unavailable to update the Freight Analysis Framework, a Departmental tool that resides in the Federal Highway Administration that allows analysis of freight movements by all Operating Administrations for their particular purposes;

FY 2007 Base:

The Freight Data Program for FY 2007 includes final preparation for and the conduct of the 2007 Commodity Flow Survey, and processing and disseminating international trade and freight transportation data, including data used in the formulas for calculating apportionments for border state infrastructure grants under SAFETEA-LU.

Anticipated FY 2007 Accomplishments

- Publish *U.S. North American Trade and Freight Transportation Highlights*, a report which provides a comprehensive summary of North American Freight flows for all modes of transportation.
- Finalize research via Joint Investigative Teams with the Census Bureau to address specific issues and research areas related to the 2007 Commodity Flow Survey such as scope and industry coverage; sampling, weighting, and estimation; mileage calculation process; and form design and content. Finalize the survey instrument and field the survey. Begin to calculate the miles for freight shipments collected in the survey.
- Release the Transborder and Border Crossing Freight data, permitting scheduled and reliable access to a wide variety of customers who utilize the U.S. international freight data, including Departmental staff, Congressional staff, state transportation departments, international organizations, and universities and academics. Customers use these data for a variety of purposes, including trade corridor studies and transportation infrastructure planning.
- Participate in planning and design workshops for the International Trade Data System (ITDS) that are held by the U.S. Department of Homeland Security's Customs and Border Protection to ensure that needed transportation data are provided.

FY 2008 Budget Request

In FY 2008, the Freight Statistics Program will validate and finalize the data collected for the 2007 Commodity Flow Survey—a major, national benchmark survey of shippers. It will also finalize mileage calculations for the shipments in the survey. The Freight Statistics Program will continue to release transborder and border crossing freight data on a monthly basis, providing data users with trade statistics on the commodities and mode of transportation used with our largest trading partners. The Freight Statistics program will include outreach to customers to assure that the most important data are being provided, and innovative methods for meeting freight data needs at the state and local levels will be encouraged. The Freight Statistics Program will initiate design, testing and deployment of the ITDS freight data system, in cooperation with other DOT agencies.

IT investment: The Intermodal Transportation Database (RITAX004) investment costs for the freight program total \$0.21 million and includes 1.0 FTE, the freight portion of BTS' data warehouse.

Explanation of Funding Changes for Freight Statistics

Amount: -480,000

The budget reduction for the freight program is due to the FY 2008 reduction for Revenue Aligned Budget Authority (RABA).

Detailed Justification for Transportation Economics

Transportation Economics

FY 2008 Request: \$1,811,000

FTE: 8.6 [includes 2.6 overhead]

Overview:

The Transportation Economics Program develops basic economic and financial data to support transportation decision making, including development of economic indicators that explain the relationship between transportation and the economy. Program products provide transportation policy officials with information and data on how their decisions impact the larger economy so they can optimize transportation investments, improve transportation system productivity, and increase the value of transportation to users. The program focuses on topics identified by Congress in BTS' authorizing legislation, such as transportation sector productivity, transportation costs, and national accounting for transportation expenditures.

Without the Transportation Economics program:

- The Transportation Satellite Accounts, which measure the effect of transportation upon Gross Domestic Product (GDP), would not be produced. DOT and other governmental economists would have no other data to accurately calculate the total effects of the transportation sector upon the economy. Furthermore, national economic multipliers would not include the in-house transportation sector and therefore would understate the calculations used for transportation investment purposes.
- The Air Travel Price Index (ATPI), an index of representative air fares that measures the changes that people pay for commercial air travel, would not be published. Without the ATPI, the aviation industry would not have accurate information on the increase in air travel prices by airport, which are used for analysis of the aviation industry, and the Bureau of Labor Statistics would not be able to use the ATPI in a supporting capacity for the development of the Consumer Price Index, nor the Bureau of Economic Analysis as a price deflator in GDP calculations.
- RITA/BTS would not be able to fulfill its legislative mandate under SAFETEA-LU to produce measures of transportation productivity. The productivity data are important to DOT for evaluating the economic performance of transportation modes and determining priorities for resource allocation, and are used by economists to understand the factors that affect changes in productivity over time to evaluate alternative for increasing production efficiency.
- RITA/BTS would not be able to develop and publish key financial information such as the Government Transportation Financial Statistics (GTFS) and the State Transit Expenditure Survey, which provide data on Federal, state and local

transportation revenues and expenditures. Without the GTFS data Congress and DOT policy makers will no longer be able to track transportation expenditures and revenue by mode. Elimination of the transit expenditure survey, developed and used in cooperation with the Association of American State Highway Transportation Organizations (AASHTO), would result in Congress, DOT and State and local governments not being able to track their funding sources as accurately.

FY 2007 Base:

The Transportation Economics Program in FY 2007 includes development of the Transportation Satellite Accounts (extending the transportation component of GDP beyond for-hire services to include transportation services provided in-house by industries), quarterly production of the Air Travel Price Index, measures of productivity, studies of the economic consequences of transportation investments, and publication of Government Transportation Financial Statistics.

Anticipated FY 2007 Accomplishments

- Publish Transportation Satellite Account (TSA) estimates for private truck, rail, aviation, and waterborne modes on the BTS Transportation Economics web page.
- Produce the Air Travel Price Index (ATPI) on a quarterly basis. Continue development of new ATPI automated system components, including a seasonal adjustment component.
- Develop multi-factor productivity (MFP) measures and analysis for trucking and pipeline modes. This will include an enhancement of previous long-distance trucking estimates and an assessment of the causes for productivity gains.
- Publish the 2006 edition of the Government Transportation Financial Statistics (GTFS).
- Update and publish the State Transit Expenditure Survey.

FY 2008 Budget Request

In FY 2008, the Transportation Economics Program will produce the core set of economic data and indicators as in 2007, which include the Transportation Satellite Accounts, Air Travel Price Index, Government Transportation Financial Statistics, multi-factor productivity measures, and the State Transit Expenditure Survey.

Detailed Justification for Geospatial Information

FY 2008 Request: \$1,758,000
FTE: 7.4 [includes 2.4 overhead]

Overview:

The vision of the Geospatial Information Program is to improve transportation decision making by providing a comprehensive set of geospatial information as the basis for planning, policy, investment, and asset management. The Geospatial Information Program provides visual and analytic tools that enable data to be linked using a geographic reference. This capability is particularly useful for transportation, which is inherently spatial, and represents an important IT investment. Transportation planners and others can use geospatial information systems to prioritize highway maintenance projects, study noise “footprints” around airports, and plan for system disruptions due to natural disasters or national security threats.

FY 2007 Base:

In FY 2007, BTS will work with other modal administrations to distribute transportation data through the National Transportation Atlas Databases (NTAD). BTS is congressionally mandated to produce the NTAD on an annual basis. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 contained the original mandate and it remained in the legislation that followed, including the most recent SAFETEA-LU. The NTAD is used by geospatial professionals throughout all levels of government plus academia and the private sector. Many of the transportation data sets have been incorporated in to Department of Defense programs for national security.

BTS built a sophisticated mapping capability for the DOT Crisis Management Center (CMC) and will continue its support, providing mapping and spatial analyses during emergency transportation situations. BTS also provides this critical function for Continuity of Operations (COOP).

As mandated in SAFETEA-LU, Section 5601 (6), this program has the responsibility to lead the development of the transportation component of the National Spatial Data Infrastructure (NSDI). This responsibility is also a requirement in OMB Circular A-16 and Executive Order 12906. Staff have been leading DOT through participation in the development of the Geospatial Line of Business. Also, this staff chairs the Federal Geographic Data Committee (FGDC) Ground Transportation Subcommittee, and participates on the FGDC Coordination Group. In response to OMB memorandum M-06-07, the RITA Administrator has been designated the Senior Agency Official for Geospatial Information within DOT.

Anticipated FY 2007 Accomplishments

- Lead DOT and the geospatial transportation community and support the development of the legislatively mandated NSDI through the e-government initiatives Geospatial One-Stop and the Geospatial Line of Business, participate in the Federal Geographic Data Committee, the National States Geographic Information Council, the Transportation Research Board, and the AASHTO GIS for Transportation Symposium Planning Committee.
- Produce the Congressionally mandated National Transportation Atlas Databases (NTAD) for 2007. Staff will gather transportation geospatial data and accompanying metadata from throughout the DOT and other federal agencies. The data will be compiled and distributed via CDROM.
- Provide mapping and geospatial analysis support. This will include standard map products for BTS publications and surveys.
- As practical, provide mapping and geospatial analysis support to DOT's Crisis Management Center (CMC), for Continuity of Operations (COOP), and government-wide exercises such as TOPOFF.

FY 2008 Budget Request

In FY 2008, this Program will compile and disseminate transportation specific geospatial data. The data will continue to be disseminated through the annual release of the National Transportation Atlas Databases (NTAD).

This Program will provide geospatial leadership, in the form of mapping and analyses, to decision makers. As practical, this Program staff will provide support to the Department's Crisis Management Center (CMC) and for Continuity of Operations (COOP).

This staff will continue leading and representing DOT in the geospatial community through Federal Geographic Data Committee participation, support of the National Spatial Data Infrastructure, and continued support of the Geospatial Line of Business.

Detailed Justification for Compilations, Methods and Standards

FY 2008 Request: \$7,416,000
FTE: 30.0 [includes 12.0 overhead]

Overview:

The statistical compilations component of this program brings together data from the Bureau's programs and other national data sources to produce the Congressionally mandated Transportation Statistics Annual Report, which presents the state of transportation data and discusses 13 different topics specified by Congress in SAFETEA-LU. In response to SAFETEA-LU's mandate to compile and publish a comprehensive set of transportation statistics, the program produces National *Transportation Statistics* as a broad reference, now updated quarterly on the web. The BTS pocket guide to transportation provides aggregate statistics in an easy to use format, consistent with the SAFETEA-LU mandate to make statistics published by BTS readily accessible to the public. The data in these products cover the DOT strategic goals of safety, mobility, global connectivity, security, and environmental stewardship.

To assure the quality of these compilations and of individual data programs throughout the Department, the Methods and Standards program coordinates efforts to develop standards for transportation data; develops and implements statistical standards and policy for the BTS; maintains with the DOT-CIO the statistical quality guidelines for the Department; consults with other DOT operating administrations on statistical issues; and provides statistical support for DOT's annual performance report. These also are Congressionally mandated roles for BTS under SAFETEA-LU, and relate to the DOT strategic goal of organizational excellence.

The Compilations, Methods and Standards program also prepares publications and other materials for printing and posting on the web, and handles product distribution. Publishing statistics is a Congressionally mandated role for BTS under SAFETEA-LU.

Without the Compilations, Methods and Standards program:

- RITA/BTS would not be able to fulfill its legislative mandate under SAFETEA-LU to review and report to the Secretary on the sources and reliability of statistics proposed to be used to measure outputs and outcomes under the Government Performance and Results Act;
- RITA/BTS would not be able to fulfill its legislative mandate under SAFETEA-LU to develop guidelines for collection of transportation statistics in a number of areas; this could result in less accurate, reliable and relevant information than might otherwise be the case;
- Congress would not have the annual report on transportation statistics it has mandated since 1991, and the information available for that report could be less accurate, reliable and relevant because the guidelines mentioned above would not be developed;

- Transportation planners, decisionmakers, the media, and the public would lose many authoritative compilations of multimodal transportation data covering most transportation topics and updated regularly.

FY 2007 Base:

Statistical compilations include recurring print and web publications: *National Transportation Statistics*, the annual report to Congress, and the *BTS Pocket Guide to Transportation*. The program also provides transportation data to the White House website, and improves and disseminates transportation data through multinational exchanges. As required under SAFETEA-LU, the program also interacts with the Transportation Research Board on a data needs assessment.

The Methods and Standards program will conduct statistical standards compliance reviews to assess and help promote quality for BTS data systems and information products; refine BTS' statistical standards and guidelines to provide procedural tools and specific descriptions of minimum levels of quality; provide consulting support to other DOT modes to help ensure that rulemakings and other program actions are based on sound, defensible data; and provide statistical support for the Department's Performance and Accountability Report.

Anticipated FY 2007 Accomplishments

- Publish the Transportation Statistics Annual Report (TSAR) to provide Congress with key indicators on transportation issues.
- Monitor progress of National Research Council's National Transportation Information Needs Assessment required by SAFETEA-LU to be completed in FY 2008.
- Produce and release monthly on the web the Transportation Services Index (TSI), which is a measure of the movement of freight and passengers, and is an indicator of changes in the economy.
- Update, publish, and distribute the annual BTS Pocket Guide to Transportation, including revisions resulting from consultations with key customers.
- Produce the website version of National Transportation Statistics compendium and an associated volume of state statistics.
- Provide the White House Economic Statistics Briefing Room website with key Transportation Indicators.

- Prepare BTS products for print publication and web posting, including scheduled data releases, recurring publications and special reports, and distribute products to the public.
- Continue the North American Interchange with Canada and Mexico and other data exchanges with other nations.
- Complete the review of compliance with BTS Statistical Standards and Guidelines. Provide training in the application of these standards and monitor their implementation.
- For the DOT Performance and Accountability Report (PAR), provide assistance to the DOT operating administrations with rebaselining of performance measures, and performance measure estimation, projection, and extrapolation methodologies. Assemble data from the DOT operating administrations and prepare the data presentation for this annual report, to help ensure the reliability of the data, transparency in the process, and utility in data presentation.
- Support DOT in the interpretation and implementation of the statistical portion of the DOT Information Dissemination Quality Guidelines. Support other ad hoc requests from DOT such as review of statistical methods in rulemaking processes.
- Continue monitoring agency-wide confidentiality procedures. Review information products for potential disclosures of confidential information. Continue annual confidentiality training to all BTS employees and contractors. Assess privacy compliance of RITA information systems.

FY 2008 Budget Request

BTS will continue to produce, publish and make available a core set of online and print documents, and scheduled data releases, at a level commensurate with resources. This includes a Congressionally mandated annual report, a web edition of National Transportation Statistics; a Pocket Guide to Transportation, and regularly scheduled data releases. It also includes data interchanges with Canada and Mexico. This program will also provide assistance to the DOT operating administrations for the DOT Performance and Accountability Report, perform data quality reviews of BTS data systems requested by the BTS Director, and provide training on BTS' data quality standards and its confidentiality standards.

Detailed Justification for the National Transportation Library

FY 2008 Request: \$2,345,000

FTE: 9.0 [includes 4.0 overhead]

Overview:

The National Transportation Library (NTL) is a virtual library, accessible through the Internet, providing broad access to the nation's transportation research and planning literature. The NTL offers reference services, a digital archive, web portal, and access tools including Transportation Research Information Service (TRIS) Online and the Transportation Research Thesaurus (TRT) in cooperation with the Transportation Research Board.

The NTL was created out of the need to fill a national leadership role to support and coordinate networking among transportation libraries. Within the Department, it provides a knowledge access point through its reference services. Internationally, the NTL's Organization for Economic Cooperation and Development (OECD) membership permits TRIS Online participation in the International Road Transport Database. The NTL collection provides a metadata standard and repository for technical, research, and statistical policy resources. The collection is moving to a metadata and digital object exchange environment to serve the University Transportation Centers and other modes with a long term solution to information access.

The NTL is unique in its role as a catalyst and tool for national transportation information access. It stands alone in the industry for representation and cooperation with other national libraries, participating in convocations and forums on behalf of the Agency. Without the NTL, there would be a void in national leadership of transportation information.

Legislative Mandate:

49 U.S.C. 111(e) directs BTS to establish a National Transportation Library, create a collection of statistical and other information, to promote access to the library, to improve transportation community's ability to share information and to work with other transportation libraries and information providers in to achieve these goals.

FY 2007 Base:

The major components of the NTL are:

Reference Management: This is the transportation information front-door to the Department. The NTL reference service responds to transportation information requests from the community; including DOT, other federal agencies, State DOTs, and Congress. The library staff handles about 3,000 requests for information each month. Special technology is used to retain canned responses and FAQs to assure consistency and efficiency in delivering repeatedly requested information, and making it more accessible to the user.

Technology Management: Through a partnering agreement with the Transportation Research Board, the NTL published the Transportation Research Information Service on the Web as “TRIS Online”. This provides researchers and the public with free desktop access to over 500,000 information and research resources. It is the broadest coverage of transportation resources of any analytical index in the world. The recently released NTL Integrated Search Interface greatly improves access to TRIS Online and NTL resources, and provides for expansion into other department collections.

Collection Management: The NTL’s digital archive, which contains 16,000 full-text documents, provides public access to significant transportation documents from the University Transportation Centers, State DOTs, transportation associations, and other research and policy institutions. The NTL portal links to select transportation web resources. NTL metadata provide controlled vocabularies for access to both the digital archive and the portal resources. NTL access tools include directories, bibliographies, the Transportation Research Thesaurus, and a taxonomy. The NTL has developed the Rural and Agricultural Transportation Data and Information Resources website, and maintains links to 130 transportation libraries and information centers throughout the country.

Networking: Through partnership with the Federal and State DOTs, academic transportation libraries, and the largest holder of library catalog records, the Online Computer Library Consortium (OCLC), the NTL has made available to the public, a one-stop portal to the catalogs of the Nation’s most significant transportation libraries. The NTL created TLCat which provides users with unprecedented desktop access to policy, administrative, operations, and research literature through interlibrary loan. In cooperation with other transportation libraries and information providers, the NTL creates and maintains such resources as the Directory of Transportation Libraries and Bibliographies of Transportation Resources.

Anticipated FY 2007 Accomplishments

- Continue to provide online reference services, answering the thousands of questions received each month that are related to the business of the Department of Transportation. Queries are received by telephone (800- 853-1351), or by email: Librarian@bts.gov, Answers@bts.gov, DOT.Comments@dot.gov, or TRIS@bts.gov.
- Continued improvement of the Open Archive Initiative Compliance. This effort will expand the universe of archives that hold digital reports, and thus improve long term preservation and access.
- Work with University Transportation Centers and other object and data providers to create a more efficient method for transfer of digital documents and metadata.

- Collect materials focusing on US transportation policy, planning, research, and operations; resources of long-term significance and value; and resources indexed in the Transportation Research Board's TRIS database.
- Work with other transportation librarians to develop a national plan for collection development.
- Increase total number of full-text links on TRIS Online.
- Increase the number of participating libraries in TLCat, and expand the regional and national network.

FY 2008 Budget Request

- The NTL will continue to provide quick, courteous, and accurate answers to requests for information within 24 – 48 hours of receipt.
- The NTL will continue to provide access to, and improve its Digital Collection.
- The NTL will continue to expand and provide access to TLCat.

Detailed Justification for Air Transportation Statistics

Reimbursable

FY 2008 Request: \$4,219,000

FTE: 19

Overview:

RITA/BTS collects and publishes a variety of data about the operations of foreign and U.S. domestic airlines. The primary purpose of the program is to provide Congress, DOT, and other Federal agencies with uniform and comprehensive aviation data that are accurate, timely, and relevant for use in making aviation policy decisions and administering aviation-related programs. DOT program uses of BTS airline data include the Airport Improvement program, Essential Air Service, monitoring the performance of the air transportation industry, and conducting status evaluations at both the individual airline and at industry levels, as well as conducting International Negotiations of air service agreements. The use and visibility of this airline data collection, which was originally mandated to enable oversight of airline competition, has grown the past five years as airlines and their markets have increased in complexity and competitiveness.

Without the RITA/BTS airline data, such as the Form 41 Reports, important DOT programs, such as the FAA Airport Improvement Program (AIP) would be unable to rely upon the BTS Form 41 traffic data to distribute billions of dollars, annually, to airports. In order to distribute the airport monies, the FAA would have to develop an alternative mechanism to allocate the AIP funds to the airports. Similarly, the Office of the Secretary has several important mission-critical airline programs that would be severely impacted without RITA/BTS airline data, including its International program which relies upon the Form 41 data for international negotiations, grants of authority to airlines and other purposes. Also, without the RITA/BTS On-Time Flight Performance and Flight Delay data that are published monthly by DOT, important gaps in the public understanding of flight delays would be the result; airlines and airports would lack data on their standing in relationship to the flight performance rankings of other airlines and airports. In brief, absence of RITA/BTS airline data would be an impact to Congress and industry.

FY 2007 Base:

The Air Transportation Statistics Program collects, processes, and regularly releases/disseminates airline data from four primary data collections: On-Time Flight Performance (including causes of delays), domestic and international passenger and freight traffic, passenger ticket information, and airline financial and employment information. This air passenger itinerary and fare information is disseminated on the BTS website and directly from BTS as datasets and reports. The program also provides specialized reports for DOT and other Government agencies that they require in fulfilling their legislative mandates.

BTS collects and disseminates airline financial, traffic, performance and operational data from 150 U.S. airlines. Traffic data to and from the United States are collected and disseminated from 135 foreign air carriers that operate air service to the United States. Annually, BTS collects over 8,000 reports from U.S. and foreign airlines. Besides collecting and disseminating airline data, BTS continues to enhance its airline data edit and validation procedures in order to maintain a high level of data quality for DOT decision-makers.

Anticipated FY 2007 Accomplishments

- Release traffic data monthly covering total monthly air passenger enplanements for the industry, airline rankings by air passenger enplanements, traffic volume, revenue miles, available seat miles, load factors and trip lengths.
- Release domestic operating profit and loss data quarterly for individual airlines and by carrier groups (e.g. majors, low cost carriers); airline domestic unit costs; and revenue yield.
- Release on-time performance data monthly, providing the overall on-time arrival and departure performance of airlines, airports, and specific flights.
- Provide data monthly on causes of flight delays, characterized in five categories: Air Carrier, Extreme Weather, National Aviation System (NAS), Late-arriving aircraft and Security.
- Maintain and operate the Airline Reporting and Data Information System (ARDIS) data processing environment.
- Consistent with E-GOV goals, worked toward developing and implementing a pilot program to enable air carriers to file their financial, operational, and traffic data reports with BTS using a more efficient electronic means (Web-filing), improving data processing efficiency and reducing reporting burden on the industry. Achieved electronic filing of selected air carrier financial data in FY06 in an initial pilot program, and plan to expand the Web e-filing program to encompass additional airline electronic filings covering a broader spectrum of their data in FY07 and FY08.
- Develop and implement enhancements to the processing system for data validation, improving the edit logic or “business rules” to maintain a high level of airline data quality.
- Continue enhancing the IT systems for airline data processing, within available resources. Continue the improvements to the “Production” airline data server and the “Developmental” server that (together with a “fail-over” server to avoid airline data production losses in the event of an IT system failure) were deployed in FY06 and planned for FY07 in order to better accommodate Web-filing and foster the development of other airline data collection and data-edit improvements.

FY 2008 Budget Request

In FY 2008, the Air Transportation Statistics Program will continue the maintenance and operation of the existing airline data collections, ensuring high quality data and maintaining a steady state production of accurate, timely and relevant outputs. RITA/BTS plans to continue to expand the coverage of its pilot Web-Filing project to include additional airlines and additional databases that can benefit from the advances implemented in electronically filing airline data. BTS will also continue with the implementation of its total quality management program, improving the integrity of its airline data systems, and ensuring data consistency across data systems and across all the historical years of data collection. In addition, the program will continue planning and implementation of an airline data modernization program in partnership with other DOT organizations.

The funding request for this program is \$4,219,000 from the FAA Operations account for sustaining the collection, processing, quality assurance, and dissemination of the data described in the above sections. This funding is critical, because without this funding, there would be no airline data for 2008 and it would be much more expensive to resume the program in one or another form at a later date. Without current airline data, DOT would not be able to analyze the data for the Secretary on a routine basis or provide ad-hoc analysis on very tight time lines when special occasions (such as emergencies during a major air accident) require it. That in turn impacts the ability of the Department to have a complete picture of the airline industry and make decisions based on quality data. In the same vein, the FAA Airport Improvement Program (AIP) would not have current data to make decisions on the distribution of billions of dollars to airports. Also, industry would lose the data they had come to depend on for market and service improvement analysis and RITA/BTS would not have the ability to provide airline industry data to Congress or the White House when such requests are made. The public would have no access to information regarding the airline industry either in the form of the Air Travel Consumer Report released monthly by DOT or through the web site managed by RITA/ BTS.

IT Investment: The IT investment costs for the air program total \$1.859 million and includes 4.0 FTEs. These funds cover the RITAX008: BTS Mid Tier Server/Airline Report Data Information System (\$0.659 million and includes 2.0 FTEs), and the air portion of BTS' data warehouse RITAX004: Intermodal Transportation Database that supports OST airline decision-makers (\$1.2 million and includes 2.0 FTEs).

Section 4:
Budget Request by Performance Goal
Exhibits and Performance Budgets

Exhibit IV-1
FY 2008 BUDGET REQUEST BY STRATEGIC OBJECTIVE AND PERFORMANCE GOAL
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
RESEARCH AND DEVELOPMENT
Appropriations, Obligation Limitations, & Exempt Obligations
(dollars in thousands)

Strategic & Performance Goals by Program Activities	FY 2006 Actual	FY 2007 Pres. Budget	FY 2007 CR	FY 2008 Request
1. Safety				
Hazardous Materials	79	0	0	0
Hydrogen Fuels Safety R & D	248	407	248	426
Subtotal	<u>327</u>	<u>407</u>	<u>248</u>	<u>426</u>
FTE	0.5	0.5	0.5	0.5
2. Reduced Congestion				
Transportation Futures & Applied Tech	0	0	0	0
NDGPS	0	0	0	5,348
Subtotal	<u>0</u>	<u>0</u>	<u>0</u>	<u>5,348</u>
FTE	0	0	0	1
3. Global Connectivity				
Transportation Futures & Applied Tech	0	3,659	0	0
Subtotal	<u>0</u>	<u>3,659</u>	<u>0</u>	<u>0</u>
FTE	0	9	0	0
4. Environmental Stewardship				
Hydrogen Fuels Safety R & D	247	407	247	426
Subtotal	<u>247</u>	<u>407</u>	<u>247</u>	<u>426</u>
FTE	0.5	0.5	0.5	0.5
5. Organizational Excellence				
RD&T Coordination	5,142	3,744	5,221	5,800
Subtotal	<u>5,142</u>	<u>3,744</u>	<u>5,221</u>	<u>5,800</u>
FTE	20	23	22	34
TOTAL AGENCY COSTS	5,716	8,217	5,716	12,000
FTE (direct funded only)	21.0	33.0	23.0	36

Exhibit IV-1
FY 2008 BUDGET REQUEST BY STRATEGIC OBJECTIVE AND PERFORMANCE GOAL
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
BUREAU OF TRANSPORTATION STATISTICS (Allocation from HTF)
Appropriations, Obligation Limitations, & Exempt Obligations
(dollars in thousands)

Strategic & Performance Goals by Program Activity	FY 2006 Actual	FY 2007 Pres. Budget	FY 2007 CR	FY 2008 Request
1. Safety				
Air Transportation Statistics (indirect)	0	0	0	0
Subtotal	0	0	0	0
FTE	0	0	0	0
2. Reduced Congestion				
Geospatial Information	1,606	1,758	1,758	1,758
Subtotal	1,606	1,758	1,758	1,758
FTE	7.4	7.4	7.4	7.4
3. Global Connectivity				
Travel Statistics	3,469	2,947	2,947	2,947
Freight Statistics 1/	8,839	11,203	10,453	10,723
Transportation Economics	1,979	1,811	1,811	1,811
Compilations	4,403	4,945	4,945	4,945
Air Transportation Statistics	2,234	0	0	0
Subtotal	20,924	20,906	20,156	20,426
FTE	76.6	76.6	95.6	76.6
4. Organizational Excellence				
Methods and Standards	2,165	2,471	2,471	2,471
National Transportation Library	2,035	2,345	2,345	2,345
Subtotal	4,200	4,816	4,816	4,816
FTE	19	19	19	19
TOTAL Agency Request	26,730	27,480	26,730	27,000
FTE (direct funded only)	103	103	122	103

1/ An increase of \$480K in FY 2007 over amounts provided in SAFETEA-LU is due to an increase in the Revenue Aligned Budget Authority (RABA) estimates.

2/ Direct funding of Air Transportation Statistics is proposed to end in FY 2006, when that activity would be funded through reimbursable funds. Therefore, only spreads of indirect costs show up in FY 2006 and 2007.

Exhibit IV-2
FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND PERFORMANCE GOAL
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
RESEARCH AND DEVELOPMENT
Appropriations, Obligation Limitations, & Exempt Obligations
(dollars in thousands)

	FY 2006		FY 2007		FY 2007		FY 2008	
	Actual		Pres. Budget		CR		Request	
Appropriation/Program								
Activity/Performance Goal	<u>(\$000)</u>	<u>FTEs</u>	<u>(\$000)</u>	<u>FTEs</u>	<u>(\$000)</u>	<u>FTEs</u>	<u>(\$000)</u>	<u>FTEs</u>
Salaries and Administrative Expenses	4,606	19	5,247	0	4,662	21	5,964	32
Hazardous Materials R&D	79	0	0	0	0	0	0	0
Hydrogen Fuels Safety Research & Development	495	1	495	5	495	1	500	1
Transportation Futures and Applied Technology Program	0	0	2,228	25	0	0	0	0
RD&T Coordination	536	1	247	3	536	1	536	2
Nationwide Differential Global Positioning System	0	0	0	0	0	0	5,000	1
TOTAL	5,716		8,217		5,693		12,000	
Total Direct FTE		21		33		23		36

Exhibit IV-2
FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND PERFORMANCE GOAL
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
BUREAU OF TRANSPORTATION STATISTICS (HTF Allocation)
Appropriations, Obligation Limitations, & Exempt Obligations
(dollars in thousands)

Appropriation/Program	FY 2006		FY 2007		FY 2007		FY 2008	
	Actual		Pres. Budget		CR		Request	
Activity/Performance Goal 1/	(\$000)	FTEs	(\$000)	FTEs	(\$000)	FTEs	(\$000)	FTEs
Travel Statistics	3,469	12	2,947	14	2,947	14	2,947	14
Freight Statistics	8,839	30	11,203	34	10,453	34	10,723	34
Transportation Economics	1,979	9	1,811	9	1,811	9	1,811	8.6
Geospatial Information	1,606	7	1,758	7	1,758	7	1,758	7.4
Compilations, Methods and Standards	6,568	26	7,416	30	7,416	30	7,416	30
National Transportation Library	2,035	7	2,345	9	2,345	9	2,345	9
Air Transportation Statistics 2/	2,234	12	0	0	0	0	0	0
TOTAL	26,730		27,480		26,730		27,000	
Total Direct FTE		103		103		122		103

1/ Overhead cost has been reallocated to other programs.

2/ Requesting reimbursable to fund the direct Air Transportation Statistics program.

SAFETY

This funding request contributes to the DOT Safety strategic objective and to the following performance outcomes:

- Performance Outcome 1: Reduction in transportation-related deaths.**
- Performance Outcome 2: Reduction in transportation injuries.**

This request would allow RITA to:

- Broaden and accelerate the hydrogen safe-handling and hydrogen safety education and training initiative undertaken through the National Association of State Fire Marshals.
- Undertake technical hydrogen safety research.

The resources requested to achieve the performance outcomes are:

		FY 2006 Actual	FY 2007 Pres. Budget	FY 2008 Request
Performance Goal 1 and 2				
	RD&T – Hydrogen/Hydrogen Safety	327,000	407,000	426,000
	BTS - NA	0	0	0
	Total	327,000	407,000	426,000
	Total FTE	.5	.5	.5
Strategic Objective Total		327,000	407,000	426,000
Strategic Objective Total FTE		.5	.5	.5

SAFETY

PERFORMANCE ISSUES

Hazardous Materials - To improve hazardous materials safety and security by facilitating safety research, the development of technologies, sharing of research result and technology transfer.

- Hydrogen Safety - RITA will conduct research to improve system and operational safety, conduct system assessments and risk analysis to determine system weaknesses and opportunities for improvement, and identify and develop new technologies to improve vehicle, component, transport, and operational safety across all modes. RITA will continue to work closely with the National Association of State Fire Marshals and the Hydrogen Executive Leadership Panel (HELP) to develop and organize cooperative initiatives to determine how best to protect responders in real-world hydrogen-related scenarios and develop training and educational materials to support Federal and state initiatives. RITA will also continue R&D in support of, and safety codes and standards development at the local, state, national, and international level as the Department's technical representative for hydrogen fuels infrastructure safety R&D committees and organizations. Work in the area of Hydrogen Safety is complemented by the work done in exploring possibilities for a Hydrogen Economy (See Environmental Stewardship).

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Complete FY 2007 Hydrogen Executive Leadership Panel deliverables including the first Hydrogen and Fuel Cell Emergency Response training and education program and begin distribution with the National Association of State Fire Marshals
- Complete hydrogen infrastructure analysis study and continue collaboration on other hydrogen pathways projects under the UC Davis led partnership
- Complete the first Phase of Hydrogen Materials Compatibility Research with Sandia National Laboratories

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Hazardous Materials</i>			
<u>Hydrogen Safety</u>			
\$426,000 / .5 FTE	1. Conduct targeted near-term research on gaps. 2. Continue partnering on safety codes and standards. 3. Continue partnering on public safety response training & education.	1. Results of non-destructive testing and inspection technologies research.	State regulators, first responders, and the public safety community are educated about the safe handling of hazardous materials.

REDUCED CONGESTION

This funding request contributes to the DOT Reduced Congestion strategic objective and to the following performance outcomes:

Performance Outcome 5: Reduced impediments to the efficient movement of freight over the transportation network, especially at key freight gateways.

This request would allow RITA to:

- Develop geospatial information and technology applications as well as spatial and remote sensing technology applications intended that can improve the performance of the nation's transportation system.
- Perform system engineering activities in support of development of a Nationwide Differential Global Positioning, System (NDGPS).

The resources requested to achieve the performance outcomes are:

	FY 2006 Actual	FY 2007 Pres. Budget	FY 2008 Request
Performance Goal 5			
RD&T - NDGPS	0	0	5,348,000
Total FTE			1.0
BTS - Geospatial	1,606,000	1,758,000	1,758,000
Total FTE	7.4	7.4	7.4
Strategic Objective Total	1,606,000	1,758,000	7,106,000
Strategic Objective Total FTE	7.4	7.4	8.4

REDUCED CONGESTION

Performance Goal 5: Reduced impediments to the efficient movement of freight over the transportation network, especially at key freight gateways.

PERFORMANCE ISSUES

Spatial Information & Related Technologies – To explore the potential impacts of spatial and related technologies on the nation's ability to manage traffic flows.

- Nationwide Differential Global Positioning System (NDGPS) – In FY 2007 NDGPS will complete single-site coverage within the Continental United States (CONUS) with the addition of six sites, resulting in a total of 41 operational NDGPS sites. Additional significant accomplishments include converting two GWEN (USAF Ground Wave Emergency Network) sites to NDGPS beacons and completing and commissioning five new priority sites.
- Geospatial Information - In FY 2007, BTS will work with other modal administrations to distribute transportation data through the National Transportation Atlas Databases (NTAD). BTS has built a sophisticated mapping capability for the DOT Crisis Management Center (CMC) and will continue its support, providing mapping and spatial analyses during emergency transportation situations. BTS will also continue to play a role in developing the transportation component of the National Spatial Data Infrastructure (NSDI).

Agency Output Measure: Ensure that the annual release of National Transportation Atlas Database (NTAD) CD is available prior to the start of the annual ESRI (Environmental Systems Research Institute) International User Conference on GIS and mapping software (to provide timely support for research, analysis, and decision-making across all modes of transportation). Goal: 1 or more weeks in advance of the target date

Agency Outcome Measure: Reduce response time for map requests by the DOT Crisis Management Center (CMC) and in support of the Continuity of Operations (COOP) plans (improve emergency response by providing current and timely information). Goal: 0.25 hour per annum reduction the first year and 0.5 hour reduction each year thereafter --long term: 4 hour turnaround by 2010

Agency Output Measure: Increase the number of National Atlas Transportation Database (NTAD) CD-ROMs distributed (to broaden the customer base for this product). Goal: 15.0% growth per annum

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Release airline on-time performance data monthly, providing the arrival and departure performance of airlines, airports, and specific flights.
- Undertake IT requirements analysis to redesign the airline data processing IT systems to meet new data requirements.
- Provide monthly data on causes of flight delays characterized in five categories.
- Produce the National Transportation Atlas Database (NTAD) for 2007.
- Develop a “Production” data server and a “Developmental” server that can accommodate Web-filing and foster the development of other airline data collection and data-edit improvements.
- Initiate a revised memorandum of Understanding among federal departments and agencies impacted by NDGPS.
- Produce an assessment of user needs for the land-based differential global positioning system.

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Spatial Information & Related Technologies</i>			
Geospatial Information			
\$1,758,000 / 7.4 FTE	1. Provide geospatial analytic support and products. 2. Support DOT on emergency activities. 3. Represent DOT on geospatial committees.	1. Annual release of NTAD.	A common foundation for transportation information analysis and exchange.
Nationwide Differential Global Positioning, System			
\$5,348,000 / 1 FTE	1. Participate in interagency partnership to determine priorities. 2. Perform operations & maintenance of current NDGPS sites.	1. Site upgrades based on basic life-cycle maintenance schedule.	Accurate positioning and location information is available for routing and control.

GLOBAL CONNECTIVITY

This funding request contributes to the DOT Global Connectivity strategic objective and to the following performance outcomes:

- Performance Outcome 2: Safer, more efficient and cost effective movement of passengers and cargo throughout international and domestic transportation systems, including U.S. ports of entry, modal and intermodal supply chains.**
- Performance Outcome 4: Enhanced competitiveness of U.S. transport providers and manufacturers in the global marketplace.**

This request would allow RITA to:

- Release transborder and border crossing freight data on a monthly basis, providing data users with trade statistics on the commodities and mode of transportation used with our largest trading partners.
- Provide prompt information on 150 airlines including passenger ticket information and airline financial and employment information for government agencies and stakeholders.

The resources requested to achieve the performance outcomes are:

	FY 2006 Actual	FY 2007 Pres. Budget	FY 2008 Request
Performance Goal 2			
RD&T Transp. Futures/Freight & Travel	0	3,659,000	0
Total FTE		9	
BTS – Freight, Travel, Compilations	16,711,000	19,095,000	18,615,000
Total FTE	51.6	68	68
Total	16,711,000	22,754,000	18,615,000
Performance Goal 4			
RD&T	0	0	0
BTS – Airline Statistics, Economics	4,213,000	1,811,000	1,811,000
Total	4,213,000	1,811,000	1,811,000
Total FTE	25	8.6	8.6
Strategic Objective Total	20,924,000	24,565,000	20,426,000
Strategic Objective Total FTE	76.6	85.6	76.6

GLOBAL CONNECTIVITY

Performance Goal 2: Safer, more efficient and cost effective movement of passengers and cargo throughout international and domestic transportation systems, including U.S. ports of entry, modal and intermodal supply chains.

PERFORMANCE ISSUES

Freight Movement - To understand freight movement patterns that impact the efficient movement of cargo throughout the supply chain.

- Freight Statistics/Domestic – The Freight Data Program for FY 2007 includes final preparation for and the conduct of the 2007 Commodity Flow Survey, and processing and disseminating freight transportation data.

Agency Outcome Measure: Maintain a minimum 80% response rate on the Commodity Flow Survey (CFS) (reduce non-response bias). Goal: 80.0% in 2007

- Freight Statistics/International - The Freight Data Program for FY 2007 includes processing and disseminating international trade and freight transportation data as specified under SAFETEA-LU as the data to be used in the formulas for calculating apportionments for border states.

Agency Efficiency Measure: Improve cost efficiencies in acquiring international freight data (Transborder data). Goal: 10.0% reduction per annum over 5 years

Passenger Travel System – To provide information about passenger movement, including travel options, behaviors and patterns.

- Travel Statistics - The Travel Statistics Program in FY 2007 will augment and refine the National Ferry Database (NFD), continue to organize and summarize U.S. Customs and Border Protection crossing data at the port level, report on international travel trends, produce updates of BTS' rural access studies, continue working with the Federal Railroad Administration on the Confidential Close Call Reporting System, begin releasing data from the Passenger System Connectivity Study, and coordinate the travel community needs for data from the Census' American Community Survey.

Agency Outcome Measure: Increase the response rate on the Omnibus Household Survey (OHS) (reduce non-response bias). Goal: 50.0%

Transportation System Information – To provide information about the state of transportation throughout all layers of the transportation system.

- Compilations - Statistical compilations include recurring print and web publications: *National Transportation Statistics*, the annual report to Congress, and the *BTS Pocket*

Guide to Transportation. The program also provides transportation data to the White House website, and improves and disseminates transportation data through multinational exchanges. As required under SAFETEA-LU, the program also interacts with the Transportation Research Board on a data needs assessment.

Agency Efficiency Measure: Improve cost efficiencies in the production of BTS' major published reference products (Transportation Statistics Annual Report, National Transportation Statistics, and the Pocket Guide to Transportation Statistics). Goal: 10.0% reduction per annum over 5 years

Agency Outcome Measure: Improve coverage of legislative mandates in the annual Transportation Statistics Annual Report (TSAR) (degree to which we support our legislative mandate). Goal: 100.0%

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Conduct 2007 Commodity Flow Survey.
- Finalize research via Joint Investigative Teams with the Census Bureau to address specific issues and research areas related to the 2007 Commodity Flow Survey including scope and industry coverage; sampling, weighting, and estimation; mileage calculation process; and form design and content.
- Publish preliminary data on the number of intermodal passenger facilities from the Passenger System Connectivity Study.
- Produce the website version of National Transportation Statistics compendium and an associated volume of state statistics.
- Provide the White House Economic Statistics Briefing Room website with key Transportation Indicators.

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Freight Movement</i>			
Freight Statistics /Domestic (BTS)			
\$7,705,000 / 23 FTE	1. Validate CFS data. 2. Finalize mileage calculations.	1. Mileage calculation data.	Transportation decision-makers are informed of key freight flow patterns and issues.
Freight Statistics/ International (BTS)			
\$3,018,000 / 11 FTE	1. Conduct outreach to assess needs. 2. Prepare border crossing and transborder data. 3. Design and test ITDS freight data system (partner).	1. Monthly transborder and border crossing data releases.	Transportation stakeholders have information about the current positioning of the US in international transportation environment.

<i>Passenger Travel System</i>			
Travel Statistics (BTS)			
\$2,947,000 / 14 FTE	1. Conduct Omnibus Survey on demand. 2. Run Confidential Close Calls reporting system.	1. Omnibus Surveys results. 2. Issue briefs and reports on various topics. 3. Rural travel analysis update.	DOT has a clear picture of the nature of passenger travel within the US and insights into where the system fails to meet the needs of travelers.
<i>Transportation System Information</i>			
Compilations (BTS)			
\$4,945,000 / 20 FTE	1. Collect and maintain transportation data.	1. Publications & postings: TSAR, NTS and Pocket Guide. 2. Custom compilations on demand.	DOT and Congress have a clear picture of the state of transportation statistics and the overall state of transportation.

Performance Goal 4: Enhanced competitiveness of U.S. transport providers and manufacturers in the global marketplace.

PERFORMANCE ISSUES

Competitive Passenger Travel - To explore the competitiveness, cost-effectiveness and efficiency of the passenger travel environment.

- Airline Statistics/Industry Performance - The Air Transportation Statistics Program regularly releases data on: domestic and international passenger and freight traffic, and passenger ticket information. It disseminates this information on the BTS website and produces reports that can be purchased. It also provides specialized reports for Government agencies. Goal: 95% in FY 2007; 100% in FY 2008

Agency Output Measure: Increase the percentage of periodic data releases (airline traffic and financial data, Transportation Services Index, and Air Travel Price Index) that occurred on schedule (enable our stakeholders and customers predictable delivery of our datasets).

Industry & System Performance - To analyze information about the reliability and performance of the nation's transportation system and the transportation industry.

- Airline Statistics/Airline Performance – The Air Transportation Statistics Program regularly releases data on on-time performance (including causes of delays) and provides specialized reports for Government agencies.

Agency Output Measure: Increase the percentage of periodic data releases (airline traffic and financial data, Transportation Services Index, and Air Travel Price Index) that occurred on schedule (enable our stakeholders and customers predictable delivery of our datasets). Goal: 100%

Industry Economics - To explore the competitiveness and economic standing of the transportation industry.

- Transportation Economic Statistics - The Transportation Economics Program in FY 2007 includes development of the Transportation Satellite Accounts (extending the transportation component of GDP beyond for-hire services to include transportation services provided in-house by industries), quarterly production of the Air Travel Price Index, measures of productivity, studies of the economic consequences of transportation investments, and publication of Government Transportation Financial Statistics.

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Release traffic data monthly covering total monthly enplanements for the industry, airline rankings by enplanements, passenger volume, revenue miles, available seat miles, load factors and trip lengths.
- Release domestic operating profit and loss data quarterly for individual airlines and by carrier groups, airline domestic unit costs; and revenue yield.
- Develop a “Production” data server and a “Developmental” server that can accommodate Web-filing and foster the development of other airline data collection and data-edit improvements.
- Undertake IT requirements analysis to redesign the airline data processing IT systems to meet new data requirements.
- Publish *U.S. International Freight Gateways* report focused on the freight flows to and from the U.S. through key ports for all modes of transportation.
- Release the Transborder and Border Crossing Freight data.
- Publish *U.S. North American Trade and Freight Transportation Highlights*, a report which provides a comprehensive summary of North American Freight flows for all modes of transportation.
- Publish Transportation Satellite Account (TSA) estimates for private truck, rail, aviation, and waterborne modes and post the data.
- Produce the Air Travel Price Index (ATPI), a quarterly index of representative air fares.
- Develop enhanced multi-factor productivity measures and analysis for long-distance trucking and pipeline modes.
- Publish the revamped Government Transportation Financial Statistics 2006 (GTFS), which will now provide greater coverage of different categories of expenditures and revenue, clearer definitions and classifications, and documentation.

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Competitive Passenger Travel</i>			
Airline Statistics/Industry Performance (BTS)			
[\$2,501,000 / 12 FTE]	1. Expand web-filing to additional states. 2. Maintain and operate airline data collections. 3. Continue data modernization project.	1. Data reports on airline financial performance. 2. Monthly airline traffic data releases.	Stakeholders are informed about the viability of the transportation industry.
<i>Industry & System Performance</i>			
Airline Statistics/Airline Performance (BTS)			
[\$1,718,000 / 7 FTE]	1. Data collection. 2. Data maintenance. 3. Continue data modernization project.	1. On-time data releases.	Stakeholders are better informed about transportation system efficiency, performance and reliability.
<i>Industry Economics</i>			
Transportation Economic Statistics (BTS)			
\$1,811/ 8.6 FTE	1. Analyze economic and financial data. 2. Develop economic indicators for transportation.	Electronic publishing: 1. Transportation Satellite Accounts, 2. Air Travel Price Index, 3. Government Transportation Financial Statistics, 4. multi-factor productivity measures, and 5. State Transit Expenditure Survey results.	Transportation decision-makers are informed about the economic impact of transportation and transportations impact on the economy.

ENVIRONMENTAL STEWARDSHIP

This funding request contributes to the DOT Environmental Stewardship strategic objective and to the following performance outcomes:

Performance Outcome 1: Reduced pollution and other adverse environmental effects of transportation and transportation facilities.

This request would allow RITA to:

- Coordinate, manage, and conduct the Department’s hydrogen R&D activities. Engage research in hydrogen fuel technology, including the hydrogen infrastructure analysis study, advanced propulsion and alternative fuels projects, and hydrogen materials compatibility research.

The resources requested to achieve the performance outcomes are:

	FY 2006 Actual	FY 2007 Pres. Budget	FY 2008 Request
Performance Goal 1			
RD&T – Hydrogen Fuels Safety R&D	247,000	407,000	426,000
BTS - NA	0	0	0
Total	247,000	407,000	426,000
Total FTE	.5	.5	.5
Strategic Objective Total	247,000	407,000	426,000
Strategic Objective Total FTE	.5	.5	.5

ENVIRONMENTAL STEWARDSHIP

Performance Goal 1: Reduced pollution and other adverse environmental effects of transportation and transportation facilities.

PERFORMANCE ISSUES

Hydrogen Economy- To encourage the transition to a hydrogen economy through development, demonstration, and deployment of advanced vehicle transport, and infrastructure technologies.

- As part of the President’s Hydrogen Fuels Initiative, RITA is charged with coordinating, managing, and executing key components of the Department’s hydrogen R&D activities to ensure fuel cell and hydrogen-fueled vehicles can be developed, demonstrated, and deployed and used as a safe and reliable alternative to petroleum fueled vehicles. This includes coordination of DOT research resources through the budget process and participation in national and international R&D partnerships. RITA also maintains the DOT and Federal Hydrogen Portal. Work in the area of a Hydrogen Economy is complemented by the work done in Hazardous Materials - Hydrogen Safety (See Safety).

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Complete hydrogen infrastructure analysis study and continue collaboration on other hydrogen pathways projects under the UC Davis led partnership
- Complete the first Phase of Hydrogen Materials Compatibility Research with Sandia National Laboratories
- Identify opportunities for cross cutting and multi-modal research within DOT

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Hydrogen Economy</i>			
\$426,000 / .5 FTE	1. Support demonstration efforts for hydrogen stations, vehicles and infrastructure. 2. Maintain DOT Hydrogen website. Support UC Davis pathways program and Sandia Laboratory.	1. DOT Hydrogen website. 2. Guidelines for hydrogen delivery and transport systems (pipeline, pressure vessels and fuel storage).	Hydrogen infrastructure is deployed by in the market.

ORGANIZATIONAL EXCELLENCE

This funding request contributes to the DOT Organizational Excellence strategic objective and to the following performance outcomes:

Performance Outcome 1: Achieved strategic management of human capital.

Performance Outcome 4: Achieved budget and performance integration.

Performance Outcome 5: Achieved e-government goals.

Performance Outcome 6: Achieved research and development goals.

This request would allow RITA to:

- Provide \$76.7 million in reimbursable funding for investment in education, research, and technology transfer through the University Transportation Centers.
- Validate performance and accountability measures and methodology for DOT and uphold the statistical quality and confidentiality of BTS statistics.
- Redesign information data structures and standardize the storage, preservation and delivery of electronic information resources within the National Transportation Library.
- Enhance Department-wide coordination by: identifying technologies, focusing DOT's efforts; assisting with deployment; and leveraging and coordinating with external parties.

The resources requested to achieve the performance outcomes are:

		FY 2006 Actual	FY 2007 Pres. Budget	FY 2008 Request
Performance Goal 1				
	RD&T – University Transp. Centers	[76,700,000]	[76,700,000]	[76,700,000]
	BTS - NA	0	0	0
	Total	[76,700,000]	[76,700,000]	[76,700,000]
	Total FTE	0	0	0
Performance Goal 4				
	RD&T - NA	0	0	0
	BTS – Methods & Standards	2,165,000	2,471,000	2,471,000
	Total	2,165,000	2,471,000	2,471,000
	Total FTE	10	10	10
Performance Goal 5				
	RD&T - NA	0	0	0
	BTS – National Transportation Library	2,035,000	2,345,000	2,345,000
	Total	2,035,000	2,345,000	2,345,000
	Total FTE	9	9	9
Performance Goal 6				
	RD&T – RD&T Coordination	5,142,000	3,744,000	5,800,000
	BTS - NA	0	0	0
	Total	5,142,000	3,744,000	5,800,000
	Total FTE	20	23	34
Strategic Objective Total		9,342,000	8,560,000	10,616,000
Strategic Objective Total FTE		39	42	53

ORGANIZATIONAL EXCELLENCE

Performance Goal 1: Achieved strategic management of human capital.

PERFORMANCE ISSUES

Research, Education & Technology Transfer - To promote transportation education, research and research results thereby advancing the transportation workforce.

- University Transportation Centers - RITA anticipates \$76,700,000 to provide financial assistance to support transportation education, research and technology transfer activities at university-based centers. UTC program funding is provided to RITA through reimbursable agreements with the Federal Highway Administration and Federal Transit Administration.

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Utilize a clearinghouse for UTC research.

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Research, Education & Technology Transfer</i>			
University Transportation Centers			
[\$76,700,000 / 0 FTE]	1. Manage grants. 2. Review UTCs' work to improve efficiency and productivity. 3. Transfer results of UTCs' research to transportation community. 4. Collect, analyze, and publicize UTC performance measures.	1. Deliver continuing education courses. 2. Deliver transportation degree courses. 3. Award grants.	Transportation professionals in sufficient numbers and qualifications to plan and operate an advanced transportation system.

Performance Goal 4: Achieved budget and performance integration.

PERFORMANCE ISSUES

Quality, Standards & Coordination - To determine data and research priorities, establish quality standards and common definitions, and coordinate transportation efforts toward common goals and objectives.

- Statistical Methods & Standards – BTS conducts data quality reviews to promote quality for BTS data systems and information products; updates internal statistical standards and guidelines to provide procedural tools and specific descriptions of minimum levels of quality; implements agency-wide procedures that protect confidential information from unauthorized disclosure; provides consulting support to other DOT modes to help ensure that rulemakings and other program actions are

based on sound, defensible data; and provides statistical support for the Department's Performance and Accountability Report.

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Complete the review of compliance with BTS Statistical Standards and Guidelines. Provide training in the application of these standards and monitor their implementation.
- For the DOT Performance and Accountability Report (PAR), provide assistance to the DOT operating administrations with performance measure estimation, projection, and extrapolation methodologies.
- Support requests from DOT such as review of statistical methods in rulemaking processes and implementation of the DOT Information Dissemination Quality Guidelines.
- Assess privacy compliance of RITA information systems.

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Quality, Standards & Coordination</i>			
Statistical Methods & Standards			
\$2,471,000 / 10 FTE	1. Complete standards and guidelines. 2. Review all DOT performance measures. 3. Maintain confidentiality protocols.	1. Statistical standards training. 2. DOT PAR documentation. 3. Confidentiality training to BTS employees. 4. Report on RITA's IT privacy compliance.	Valid statistical products that protect privacy and enable data sharing.

Performance Goal 5: Achieved e-government goals.

PERFORMANCE ISSUES

Electronic Information - To leverage library resources for the ongoing development of an accessible transportation library.

- National Transportation Library (NTL) - The NTL is a virtual library that provides broad access to the nation's transportation research and planning literature. The major components of the NTL are collection development, reference services, and cataloguing and indexing. NTL provides online Reference Services, answering the thousands of questions received each month that are related to the business of the Department of Transportation. The NTL provides reference services for the Office of the Secretary of Transportation and the Office of the Chief Information Officer by handling questions submitted through the DOT website's *DOT Comments* feature.

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Complete the redesign of the catalog and the TRIS Online data structures into Oracle to improve usability and function for collection users.
- Create a standardized method for storage, preservation and delivery of electronic information resources.
- Increase total number of full-text links on TRIS On-line.
- Increase the number of participating libraries in TLCAT.

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Electronic Information</i>			
National Transportation Library			
\$2,345,000 / 9 FTE	1. Provide reference services. 2. Build the collection. 3. Standardize the storage and preservation and delivery of electronic information. 4. Re-design TRIS.	1. New data structure. 2. Full-text links.	A rich and accessible transportation research library that is used regularly by transportation professionals.

Performance Goal 6: Achieved research and development goals.

PERFORMANCE ISSUES

Research & Development Planning & Management - To coordinate the development of transportation research and technologies toward common goals and objectives, maximizing resources toward departmental priorities and achieving efficiencies in research efforts.

RD&T Coordination - Mindful of the Government Accountability Office's (GAO) recommendations in their 2006 review of RITA's Research, Development and Technology (RD&T) Coordination function, RITA plans to improve Departmental RD&T Coordination by: completing a strategy for reviewing all DOT RD&T activities to identify opportunities for joint efforts across Operating Administrations; ensuring that DOT research is evaluated according to established best practices; preparing and reporting on a schedule of research program evaluations; and developing common performance measures for DOT RD&T activities. For FY 2008, this program will add functionality by increasing resources and activity in oversight and evaluation. Those oversight and evaluation duties are split into two types – (1) macro-level evaluation of DOTs RD&T portfolio for accountability and reporting and (2) micro-level, technology-specific evaluation of targeted research projects – and reflects the Department's next steps, following the creation and implementation of a planning and coordination process, in actually assessing the portfolio on a variety of factors.

ANTICIPATED FY 2007 ACCOMPLISHMENTS

- Submit the multi-modal *Five-Year RD&T Strategic Plan* to Congress.
- Develop a process for tracking RD&T milestones and performance goals against the *Five-Year RD&T Strategic Plan*.

FY 2008 PERFORMANCE BUDGET REQUEST

Inputs	Activities	Outputs	Outcomes
<i>Research & Development Planning & Management</i>			
RD&T Coordination			
\$5,800,000 / 34 FTE	1. Provide planning & coordination activities. 2. Develop and implement an electronic reporting mechanism to capture research program management information. 3. Plan and initiate expert review of technological DOT research activities.	1. Report to Congress, Annual Update for DOT RD&T Strategic Plan. 2. Program-level reporting tool, data and report on DOT R&D programs. 3. Schedule of expert reviews on targeted technologies.	Concentrated and coordinated R&D efforts within DOT.

Marginal Cost of Performance

Requested program changes from FY 2008 Baseline Associated with RD&T Coordination, under the goal of Organizational Excellence, are intended to increase the functionality of the RD&T planning and coordination program scope. Additional oversight and evaluation outputs will be achieved with the requested increase in the areas of (1) macro-level evaluation of DOTs RD&T portfolio for accountability and reporting and (2) micro-level, technology-specific evaluation of targeted research projects.

	FY 2008 Baseline Estimates		FY 2008 Program Changes		FY 2008 Total Request	
	(\$000)	FTEs	(\$000)	FTEs	(\$000)	FTEs
Appropriations Account(s)	247	1	289	2	536	3

Agency Output Measure Associated with this Program increase:

To describe the state of DOT research, a number of reports are provided to the leadership to recommend or assist in specific improvements in research program planning and management, to include a concentration of research resources. Information is also provided regarding the coordination of existing and emerging new research. These reports assist management in their decision making in determining the viability, usefulness and cost-effectiveness of current or proposed research.

Performance Measure:

The number of management or policy reports provided to DOT leadership.

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>
<u>Baseline Performance Level</u>							
Target	NA	NA	NA	0	0	1	1
Actual	NA	NA	NA	0	0 (est.)	----	----
<u>Incremental Performance Target</u>							
<u>With Program Changes</u>	---	---	---	0	0	0	2*
<u>(Total) Performance Target</u>							
<u>With Program Changes</u>	---	---	---	0	0	1	3

* The first two years only two reports and sets of recommendations are expected to be available. This is due to the lag time in hiring, initiating evaluation projects, and analyzing the results of such evaluations. The following year will yield a greater ratio of conclusions and recommendations to resources. This is particularly true when specific technological expertise is contracted to conduct specialized research reviews.

Section 5:
Research, Development, and Technology
Exhibits and Narrative Justification

EXHIBIT V-1

**RESEARCH, DEVELOPMENT & TECHNOLOGY
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION
BUDGET AUTHORITY
(In thousands of dollars)**

	FY 2006 Enacted	FY 2007 Pres. Bud.	FY 2007 CR	FY 2008 Pres. Request
Research and Development				
Hydrogen Fuels Safety R&D	495	495	495	500
RD&T Coordination	615	247	536	536
Salaries and Administrative Expenses	1,360	1,392	1,360	2403
Transportation Futures Program		2,228	0	0
Nationwide Differential Global Positioning System	0	0	0	5,000
Total RITA	2,470	4,362	2,391	8,439

**EXHIBIT V-2
Research and Innovative Technology Administration
FY 2008 RD&T Budget Request
(\$000)**

RD&T Program	FY 2008 Request	<i>Safety</i>	<i>Reduced Congestion</i>	<i>Global Conn.</i>	<i>Environment</i>	<i>Security</i>	<i>Org. Excellence</i>
Hydrogen Fuels Safety R&D	500	250			250		
RD&T Coordination	536						536
Salaries and Administrative Expenses	2,403						2,403
National Differential Global Positioning System	5,000		5,000				
Total RITA	8,439	250	5,000		250		2,939

RD&T PROGRAM: HYDROGEN FUELS SAFETY R&D
AMOUNT REQUESTED FOR FY 2008: \$500,000

Objective: To advance milestones adopted in the Department's Hydrogen Roadmap.

Description: RITA was created by Congress with the primary objective of serving as the Department's focal point for coordination of crosscutting research and clearing the pathway to technology deployment. To fulfill its role, as part of the Administration's Hydrogen Fuels Initiative, RITA will continue to coordinate, manage and execute key components of the Department's hydrogen activities. Many of these activities will be conducted in collaboration with DOT, Federal, State, Academic, and Industry partners.

Outputs:

- Design and operations guidelines for hydrogen delivery and transport systems including pipeline, pressure vessels, and fuel storage systems.
- Close near-term gaps identified in the independent DOT safety gap analysis study completed in FY 2006. The gaps relate to technology development and validation of hydrogen transport and storage.
- Continue participation in domestic and international partnerships, code and standards development organizations to develop safety codes, standards, and regulations and, projects and activities to ensure the safety of hydrogen transportation.
- Refine a hydrogen safety training program for firefighters and first responders and continue to disseminate the Hydrogen Executive Leadership Panel's (HELP) train the trainer and general information packages. HELP will continue to expand its national outreach program to promote awareness of hydrogen transportation safety. HELP will also continue to develop recommended practices and provide input into related consensus codes and standards.
- Conduct research to develop, evaluate, and validate under real world conditions non-destructive testing and other safety and inspection technologies that will facilitate the reliable and safe operation of components of the hydrogen transportation system.
- Support collaborative demonstration efforts for hydrogen stations, vehicles, and infrastructure with federal, state, local, industry, and academia partners. These demonstrations will focus on evaluating real world real use operational scenarios and validation.
- Maintain national and DOT hydrogen websites
- Execute individual projects and participate in collaborative efforts including the UC Davis Hydrogen pathways program that analyze or advance the hydrogen initiative and facilitate an effective transition to the hydrogen economy.

RD&T PROGRAM: RD&T COORDINATION
AMOUNT REQUESTED FOR FY 2008: \$536,000

Objective: To coordinate and provide strategic direction for the Department's research programs through annual program reviews, budget and performance planning, and prioritization, and performance tracking and reporting for the Department's research programs. Identify areas for cross-modal collaboration, and advances the deployment of innovative technologies.

Description: In direct support of the DOT Organizational Excellence strategic objective, RITA coordinates RD&T through the RD&T Planning Council and Team (per DOT Order 1120.39A) to promote the efficient use of DOT RD&T funds, prevent unnecessary duplication and encourage joint RD&T efforts.

Outputs:

- Report on RD&T milestone accomplishments, performance, and the results of RITA's coordination activities against the *Five-Year RD&T Strategic Plan*.
- Maintenance of the Web-based data tracking system for research coordination begun in FY 2007, and adding a performance reporting feature.
- Preparation of recommendations to the Secretary on strategic RD&T priorities.
- Development of FY 2010 RD&T budget priorities to include in the Department's FY 2010 budget guidance.
- Review of FY 2010 RD&T budget requests to ensure alignment with DOT strategic objectives and priorities.
- Annual RD&T program reviews.
- RD&T Funding Report to Congress (SAFETEA-LU, sec. 5208).

RD&T PROGRAM: NATIONWIDE DIFFERENTIAL GLOBAL POSITIONING SYSTEM

AMOUNT REQUESTED FOR FY 2008: \$5,000,000

Objective: To operate and maintain the Nationwide Differential Global Positioning System (NDGPS) service, in concert with the U.S. Coast Guard, the U.S. Air Force, the U.S. Army Corps of Engineers, and the National Oceanic and Atmospheric Administration, and to conduct system engineering analysis to determine the best method to meet the needs of the transportation community for high performance positioning, navigation and timing (PNT) services and identify the future role of NDGPS as part of this national architecture.

Description: Positioning, navigation, and timing services are critical to the transportation infrastructure and involve cross-cutting technology that supports multi-modal applications. U.S. Space-Based PNT Policy states that the U.S. must continue to improve and maintain GPS, augmentation systems, and back-up capabilities to meet growing national, homeland, and economic security requirements as well as those from the civil, commercial, and scientific communities.

The National Space Policy Directive (NSPD-39) identifies DOT as the focal point for civil GPS representation. However, DOT faces challenges in harmonizing and coordinating research for improved use of PNT and development of augmentation systems. Without a management structure to coordinate research activities, there is risk for duplication of effort and resources not spent wisely.

Development of a national PNT architecture will benefit from a coordinated approach from the civil community to determine the right mix of systems to meet user PNT needs in the future. RITA is the lead of the National PNT Architecture effort for DOT on behalf of the civil community. The architecture effort will involve close coordination with the other civil departments and agencies and, in particular, with the Office of Navigation and Spectrum Policy for policy decisions that result from the architecture study.

Outputs:

- System engineering including user needs evaluation, PNT technology assessment, definition of future environment, analysis tools, PNT architecture alternatives, cost/benefit analysis.
- Operation and maintenance of the NDGPS sites at a low level through a Memorandum of Agreement with the U.S. Coast Guard to preserve the government investment in this system.

EXHIBIT V-3

**Research and Innovative Technology Administration
Support for Secretarial and Administration RD&T Priorities**

Policy Initiative	Supporting RD&T Program (s)	FY 2008 Request (\$000)
E-911 — <i>Secretarial Priority</i>	Not applicable	
Highway Incident Management Improvements – <i>Secretarial Priority</i>	Not applicable	
Nationwide Differential Global Positioning System (NDGPS) – <i>Secretarial Priority</i>	Nationwide Differential Global Positioning System	\$5,000,000
GPS Modernization — <i>President's Second Term Priority</i>	Not applicable	
Congestion Relief – <i>Secretarial Priority</i>	Not applicable	
Impacts of Congestion – <i>Secretarial Priority</i>	Not applicable	
Major Corridor Capacity Improvements and Enhancements – <i>Secretarial Priority</i>	Not applicable	
Committee on the MTS — <i>Secretarial Priority</i>	Not applicable	
Freight and Port Capacity – <i>Secretarial Priority</i>	Not applicable	
Next Generation Air Transportation — <i>Secretarial Priority</i>	Not applicable	
International Trade Data System — <i>President's Second Term Priority</i>	Not applicable	
International Transportation Liberalization— <i>Secretarial Priority</i>	Not applicable	
Freight System Impacts – <i>Secretarial Priority</i>	Not applicable	
Project Review Enhancements – <i>Secretarial Priority</i>	Not applicable	
Hydrogen Research Initiative — <i>President's Second Term Priority</i>	Hydrogen Safety	\$500,000
Emergency Preparedness and Disaster Response— <i>Secretarial Priority</i>	Not applicable	

Nationwide Differential Global Positioning System (NDGPS) : In FY 2008, RITA will fund operation and maintenance of the NDGPS sites at a low level through a Memorandum of Agreement with the U.S. Coast Guard to preserve the government investment in this system. RITA also will perform system engineering activities in support of development of a National PNT Architecture that will determine the best method to meet the high performance PNT needs of the transportation community and identify the future role of NDGPS as part of this national architecture.

Hydrogen Fuels Safety R&D Research Initiative: RD&T in support of the President's Hydrogen Initiative, including efforts aimed at removing barriers to the widespread deployment of hydrogen-fueled vehicles and the development of codes and standards for the safe distribution of hydrogen. RITA's Hydrogen Fuels Safety R&D will collaborate with FTA, NHTSA, and FMCSA within the Department as well as with the Department of Energy and multiple stakeholders and partners outside government.

EXHIBIT V-4

**Research and Innovative Technology Administration
Implementation of the R&D Investment Criteria**

R&D Investment Criteria	How Applied	Actions Reflected in FY 2008 Request
Relevance	<p>All RD&T supports DOT objectives and RITA's mission. RITA works closely with internal stakeholders on all stages of program planning and execution through the RD&T Planning Council and Planning Team and through crossmodal working groups.</p> <p>The RD&T Planning Council and Team prospectively review RITA RD&T.</p>	<p>In FY 2006, RITA implemented a process for research coordination across the Department and prepared a Strategic RD&T Plan. Based on this experience and in response to the observations of the GAO, RITA is requesting increased funding for RD&T coordination in order to increase coordination efforts.</p>
Quality	<p>RITA awards funding on a competitive basis whenever possible.</p> <p>In FY 2006, RITA contracted with the Transportation Research Board to review the Department's strategic RD&T plan, as well as posted said plan for public comment. This ensured that we had stakeholder participation and input.</p>	<p>The quality of the Department's research programs will be enhanced through continued review and interaction with the NRC review committee.</p>
Performance	<p>DOT's RD&T Planning Council and Planning Team assess RD&T performance at annual program reviews.</p> <p>Program results are linked to DOT and RITA performance plans.</p> <p>Program results are annually assessed against long-term performance goals.</p>	<p>As a result of applying the performance criterion, each University Transportation Center is held accountable for results based on their strategic plan and agreed upon outcomes.</p> <p>In FY 2008, each center will report annual progress using quantifiable performance indicators.</p>

