

BUDGET ESTIMATES

FISCAL YEAR 2008

FEDERAL HIGHWAY ADMINISTRATION

SUBMITTED FOR THE USE OF THE COMMITTEES ON APPROPRIATIONS

FHWA FY 2008 BUDGET

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FEDERAL HIGHWAY ADMINISTRATION FISCAL YEAR 2008 PERFORMANCE BUDGET

ADMINISTRATOR'S OVERVIEW

The 50th anniversary of the Interstate highway system, commemorated throughout 2006, provided an opportunity to look back and celebrate one of the most significant transportation developments in history, and also gives us a chance to look forward to the future of our transportation system. The Dwight D. Eisenhower System of Interstate and Defense Highways is essential to America's prosperity and way of life, providing a vital link for connecting goods to markets here and around the world, and bringing together people from our Nation's cities, towns, and rural communities. The Interstate system has helped make the United States the most mobile country in the world.

Americans' ever-growing demand for mobility, however, has outpaced highway system capacity. On the 50th anniversary of the Interstate system, increasing congestion on the Nation's highway networks threatens the very economic prosperity and quality of life that the system has served to improve since its inception. To help reverse this trend and reduce congestion, the Department of Transportation launched a new, national initiative to reduce congestion in America. This plan, the *National Strategy to Reduce Congestion on America's Transportation Network*, provides a blueprint for Federal, State, and local officials to follow and work together to tackle this problem. Along with the Department, the Federal Highway Administration (FHWA) will build upon the programs and authorities provided by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and focus those resources, funding, staff and technology to help our State and local partners reduce congestion.

SAFETEA-LU includes a number of programs to encourage and promote the safe and efficient management and operation of integrated, intermodal surface transportation systems to mitigate the impacts of traffic congestion and improve system reliability, including the real-time system management information program, high occupancy vehicle facilities, the value pricing program, and surface transportation congestion relief solutions research. FHWA's Fiscal Year (FY) 2008 budget reflects the authorized funding levels for these programs, and also proposes an additional \$175 million for Congestion Initiative activities to be funded through reprogramming unobligated balances of inactive highway demonstration and other projects.

The FY 2008 budget request for the FHWA supports the Department's new initiative to reduce congestion in concert with the Agency's top priorities to make transportation safer and more secure, and to preserve the environment. The resources reflected in the budget will support highway programs that improve transportation for a strong America into the future – for the next 50 years and beyond.

Summary of FY 2008 Budget Request

The FHWA's FY 2008 budget includes total budgetary resources of \$40.3 billion. This level reflects a Federal-aid highway obligation limitation of \$39.6 billion and \$739 million in exempt contract authority, consistent with the base level authorized for FY 2008 in SAFETEA-LU, and includes \$429.8 million for research programs and a Limitation on Administrative Expenses of \$384.6 million. In addition, the budget proposes \$175 million specifically for Congestion Initiative

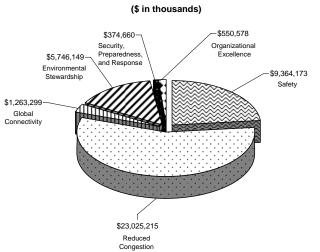
activities, to be funded by reprogramming unobligated balances of Federal-aid highway program inactive demonstration and other projects.

The request supports the Department's goals and policy initiatives, and the Agency's priorities of improving highway safety, minimizing project delays, reducing traffic congestion, and promoting environmental stewardship and streamlining. In FY 2008, the FHWA will continue to implement highway programs authorized in SAFETEA-LU, undertake efforts to improve financial stewardship and oversight, and carry out the President's Management Agenda.

Performance Budget

The FHWA's FY 2008 budget submission is presented as a performance-based budget that is aligned with the Department of Transportation's Strategic Plan, 2006-2011. Sections 2 and 3 of the submission display budget information by appropriations account, and Section 4 displays budget information by performance category and program activities. The integrated performance plan and budget reflects how resources impact the FHWA's outcome goals and provides benefits for the people and goods traveling on the Nation's highways.

The chart below illustrates the allocation of FY 2008 FHWA funds by strategic goal.



FHWA Funding Distribution by Goal

Federal-aid Highway Program

The FY 2008 budget request totals \$40.3 billion for the Federal-aid Highway Program (FAHP). This funding reflects the level authorized in SAFETEA-LU and includes an obligation limitation of \$39.6 billion for FAH programs and \$739 million in exempt contract authority (\$639 million for Equity Bonus and \$100 million for Emergency Relief). The budget does not request an increase in the FY 2008 obligation limitation to reflect the revenue aligned budget authority (RABA) calculation. The FY 2008 obligation limitation is consistent with the base funding level authorized in SAFETEA-LU. However, in the interest of preserving a positive cash balance in the Highway

Account of the Highway Trust Fund, additional obligation limitation is not requested. Within the overall Federal-aid obligation limitation, the FY 2008 request also includes an obligation limitation of \$429.8 million for research programs and a Limitation on Administrative Expenses of \$384.6 million.

Funding levels requested for the FAHP provide investments in highway improvements that support the achievement of the Department's strategic objectives.

Safety – The budget includes \$9.4 billion for activities contributing to the goal to reduce transportation-related deaths and injuries. SAFETEA-LU significantly increased funding for safety programs beginning in 2006 and established several new safety programs, including the Highway Safety Improvement Program (HSIP), which is funded at approximately \$1 billion annually. These increased resources will strengthen the ability of FHWA to provide the technical assistance, training, and delivery of national safety programs requested by the States to impact the overall fatality rate, thereby improving Agency operations and saving lives.

Reduced Congestion – The budget includes \$23.0 billion for activities contributing to the goals to reduce congestion and improve infrastructure in all modes. Highway funds apportioned to the States in FY 2008 will be used to increase roadway throughput by adding system capacity, and also for improvements to infrastructure on the Interstate System, rural and urban roads that are part of the NHS, bridges, and to continue the Highways for LIFE program. Research and Intelligent Transportation Systems funding will include programs to improve mobility through the development and testing of tools for integrated corridor operations and other applications.

The budget proposes an additional \$175 million for Congestion Initiative activities, as follows:

- **\$100 million for the Value Pricing Pilot Program.** Funding for the Value Pricing Pilot Program will accelerate progress in advancing the Urban Partnership Agreement track of the Congestion Initiative, which aims to implement pricing programs in selected metropolitan areas. The \$100 million is in addition to the \$12 million authorized in SAFETEA-LU for the Value Pricing Pilot Program in FY 2008, bringing the total program to \$112 million.
- **\$25 million to support the Corridors of the Future program**. These funds will be utilized on a discretionary basis by the Secretary to facilitate development of selected Corridors of the Future projects.
- **\$25 million for the Real-time System Management Information Program**. Funding to support the Real-time System Management Information Program (section 1201 of SAFETEA-LU) will be provided to State and local transportation agencies to plan or implement monitoring services collecting information relative to the program.
- **\$25 million for the ITS R&D program to expand congestion-related research activities.** These funds will support one or more new major ITS initiatives focused on reducing congestion.

In addition, funding within the Limitation on Administrative Expenses will be utilized to support Congestion Initiative activities, including increased staff support, travel to congested metropolitan areas, increased technical assistance to State and local partners, and extensive outreach.

Global Connectivity – The budget includes \$1.3 billion for activities contributing to the goal of more efficient movement of cargo throughout the supply chain. In FY 2008, FHWA will continue to collaborate with State and local government agencies and the private sector to ensure more effective planning, improved data collection, modeling and analysis, and infrastructure and operational improvements. Research and ITS funds will be used to promote and facilitate a more efficient global transportation system that enables economic growth and development.

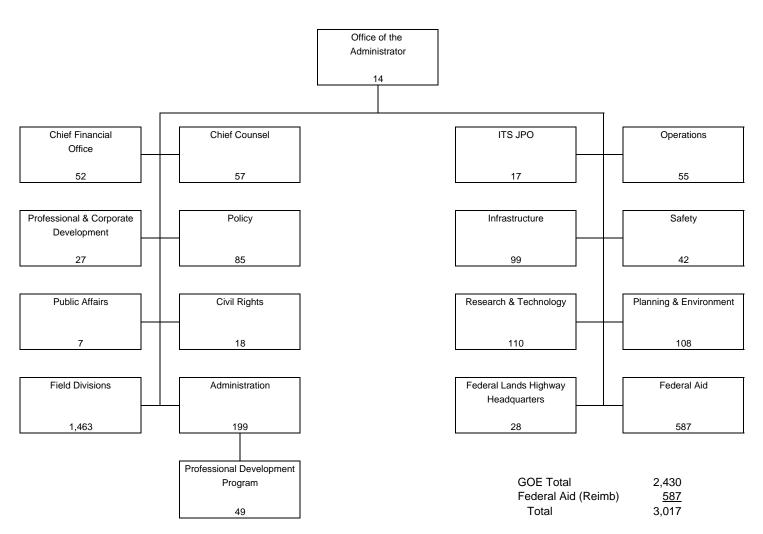
Environmental Stewardship – The budget includes \$5.7 billion for activities contributing to the goals to reduce pollution and other adverse environmental effects of transportation and transportation facilities and to streamline environmental review of transportation infrastructure projects. In FY 2008, \$1.6 billion is requested for the Congestion Mitigation and Air Quality (CMAQ) Improvement program to help States make improvements in air quality. In addition, NHS, STP, Research, and ITS funds will be used to support projects that reduce the social and environmental impact of system infrastructure improvements.

Security – The budget includes \$374.7 million for activities contributing to the goal of rapid recovery of transportation in all modes from intentional harm and natural disasters. FAHP funds will be used to support the projects and initiatives identified in State and local security plans, such as increased bridge surveillance, retrofit of existing facilities, or the enhancement of new facilities to meet current and future security needs.

Organizational Excellence – The budget reflects \$550.6 million attributed to activities contributing to the goal to achieve strategic management of human capital, competitive sourcing goals, financial performance goals, budget and performance integration goals, and e-government goals. A Limitation on Administrative Expenses (LAE) of \$384.6 million is requested for FY 2008 for the necessary salaries and benefits of 2,430 full-time equivalents (FTE) and on-going administrative expenses in support of the above Federal programs.

EXHIBIT-I





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COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY FEDERAL HIGHWAY ADMINISTRATION Appropriations, Obligation Limitations, and Exempt Programs

(\$000)

ACCOUNT	FY 2006 ACTUAL	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	FY 2008 <u>REQUEST</u>
[Limitation on administrative expenses]	[360,992]	[360,992]	[372,504]	[384,556]
Federal-aid Highways (Highway Trust Fund)				
(Liquidation of contract authorization)	(36,032,344)	(36,032,344)	(39,086,465)	(38,000,000)
(Limitation on obligations)	(34,183,033) 1/	(35,550,788) 1/	(38,244,211)	(39,585,075)
(Revenue Aligned Budget Authority - RABA)			(842,254)	
(RABA transfer to FMCSA)			-(3,502)	
Subtotal (Limitation on obligations)	(34,183,033)	(35,550,788)	(39,082,962)	(39,585,075)
Exempt contract authority	739,000	739,000	739,000	739,000
Subtotal, Obligation Limitation & Exempt Contract Authority	34,922,033	36,289,788	39,821,962	40,324,075
Contract authority (Equity Bonus adjustment)		105,172		
Cancellations of new contract authority	[-383,752] 2/	-416,347 2/		-630,976 2/
Cancellations of unobligated balances of contract authority	[-3,845,363] 3/	-3,845,363 3/		-1,369,000 3/
[Congestion Initiative]				[175,000]
Emergency Relief Program - P.L. 109-148 & 109-234 (GF) Suppl Approps	3,452,363			
Appalachian Development Highway System (GF)	19,800	82,332		
Miscellaneous Highway Trust Funds				-260,469 3/
Miscellaneous Appropriations (GF)				-149,000 3/
Total, Federal Highway Administration				
(Limitation on obligations)	(34,183,033)	(35,550,788)	(39,082,962)	(39,585,075)
Exempt contract authority	739,000	739,000	739,000	739,000
Other programs	3,472,163	187,504		[175,000]
Cancellations of new contract authority	[-383,752]	-416,347		-630,976
Cancellations of unobligated balances of contract/budget authority	[-3,845,363]	-3,845,363		-1,778,469
Total Budgetary Resources, FHWA	38,394,196	32,215,582	39,821,962	37,914,630
Discretionary	37,655,196	31,476,582	39,082,962	37,175,630
Mandatory	739,000	739,000	739,000	739,000

[] Non-add

1/Reflects \$121 million transfer to NHTSA per P.L. 109-115. FY 2006 reflects \$1,368 million flex funding transfer to FTA.

2/ Cancellation of new contract authority.

3/ Cancellation of unobligated balances.

FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT FEDERAL HIGHWAY ADMINISTRATION Appropriations, Obligation Limitations, and Exempt Programs

(\$000)

ACCOUNT	FY 2006 <u>ACTUAL</u>	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	FY 2008 Program <u>Changes ^{1/}</u>	FY 2008 <u>REQUEST</u>
[Limitation on administrative expenses]	[360,992]	[360,992]	[372,504]	[12,052]	[384,556]
Federal-aid Highways (Liquidation of contract authorization) (Limitation on obligations) (Revenue Aligned Budget Authority - RABA) (RABA transfer to FMCSA) Subtotal (Limitation on obligations)	(36,032,344) (34,183,033) 2/ (34,183,033)	(36,032,344) (35,550,788) 2/ (35,550,788)	(39,086,465) (38,244,211) (842,254) -(3,502) (39,082,962)	-(1,086,465) (1,340,864) -(842,254) (3,502) (502,113)	(38,000,000) (39,585,075) (39,585,075)
Exempt contract authority	739,000	739,000	739,000		739,000
Subtotal, Obligation Limitation & Exempt Contract Authority	34,922,033	36,289,788	39,821,962	502,113	40,324,075
Contract authority (Equity Bonus adjustment) Cancellations of new contract authority Cancellations of unobligated balances of contract authority [Congestion Initiative]	[-383,752] 3/ [-3,845,363] 4/ 	,		 -630,976 -1,369,000 [175,000]	-630,976 3/ -1,369,000 4/ [175,000]
Emergency Relief Program - P.L. 109-148 & 109-234 (GF) Appalachian Development Highway System (GF) Miscellaneous Highway Trust Funds Miscellaneous Appropriations (GF)	3,452,363 19,800 	82,332	 	 -260,469 -149,000	 -260,469 4/ -149,000 4/
Total, Federal Highway Administration (Limitation on obligations) Exempt contract authority Other programs [Cancellations of new contract authority] [Cancellations of unobligated balances of contract/budget authority]	(34,183,033) 739,000 3,472,163 [-383,752] [-3,845,363]	(35,550,788) 739,000 187,504 -416,347 -3,845,363	(39,082,962) 739,000 	502,112 [175,000] -630,976 -1,778,469	(39,585,075) 739,000 [175,000] -630,976 -1,778,469
Total Budgetary Resources, FHWA Discretionary Mandatory	38,394,196 37,655,196 739,000	32,215,582 35,738,292 739,000	39,821,962 39,082,962 739,000	-1,907,333 -1,907,333	37,914,630 37,175,630 739,000

[] Non-add

1/ Compares FY 2007 President's Budget to FY 2008 Request.
2/ Reflects \$121 million transfer to NHTSA per P.L. 109-115. FY 2006 reflects \$1,368 million flex funding transfer to FTA.

3/ Cancellation of new contract authority.

4/ Cancellation of unobligated balances.

FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND STRATEGIC OBJECTIVE FEDERAL HIGHWAY ADMINISTRATION

Appropriations, Obligation Limitations, and Exempt Obligations

(\$000)

APPROPRIATION/PROGRAM/ACTIVITY <u>PERFORMANCE GOAL</u>	<u>SAFETY</u>	REDUCED CONGESTION	GLOBAL <u>CONNECT.</u>	ENVIRON. STEWARD.	SECURITY	ORG. <u>EXCELL.</u>	TOTAL
Federal-aid Highways (Excludes LAE)	\$9,274,870	\$22.805.633	\$1.251.252	\$5.691.350	\$371.087	\$545,327	\$39,939,519
Transp. Infrastructure Finance and Innov. Act (Credit Program)	24.393	76.836	6.099	12,197	1.220	1.220	121.965
Surface Transportation Program	1,391,395	3.085.267	181,486	1,209,909	60,495	120.991	6.049.543
National Highway System	1,206,308	3,618,924	229,773	574,433	57,443	57.443	5,744,324
Interstate Maintenance	1,034,883	3,292,808	94,080	235,201	47,040	0	4,704,012
Bridge Program	924,460	2,411,635	200,970	401,939	40,194	40,194	4,019,392
Congestion Mitigation & Air Quality Improvement	0	0	0	1,623,476	0	16,399	1,639,875
Highway Safety Improvement Program	992,497	0	0	0	0	10,025	1,002,522
Equity Bonus	1,887,426	5,005,782	246,186	820,621	82,062	164,124	8,206,201
Equity Bonus (Exempt)	146,970	389,789	19,170	63,901	6,390	12,780	639,000
Federal Lands Highways	208,950	545,085	27,255	99,932	9,085	18,170	908,477
Appalachian Development Highway System	80,563	313,299	8,952	40,282	4,476	0	447,572
High Priority Projects	564,970	1,779,656	141,242	282,485	28,248	28,248	2,824,849
Projects of National and Regional Significance	88,941	279,528	8,470	42,353	4,235	0	423,527
ITS Research	57,823	44,100	2,828	0	0	0	104,751
Transportation Research, Training and Education	15,614	230,870	0	11,153	1,952	19,239	278,828
Miscellaneous Programs	626,677	1,662,054	81,741	272,468	27,247	54,494	2,724,681
Emergency Relief Program (Exempt)	23,000	70,000	3,000	1,000	1,000	2,000	100,000
Appalachian Development Highway Systems (ADHS)	0	0	0	0	0	0	0
Miscellaneous Appropriations (MAPPN)	0	0	0	0	0	0	0
Miscellaneous Highway Trust Funds (MHTF)	0	0	0	0	0	0	0
Miscellaneous Trust Funds	0	0	0	0	0	0	0
PROGRAM FUND:				<u> </u>			
SUBTOTAL PROGRAM FUND	\$9,274,870	\$22,805,633	\$1,251,252	\$5,691,350	\$371,087	\$545,327	\$39,939,519
LIMITATION ON ADMINISTRATIVE EXPENSES	89,303	219,582	12,047	54,799	3,573	5,251	384,556
TOTAL REQUEST	\$9,364,173	\$23,025,215	\$1,263,299	\$5,746,149	\$374,660	\$550,578	\$40,324,075
FTE (GOE & Federal-aid Direct)	692	1,699	94	424	28	41	2,978

EXHIBIT II-3A FY 2008 INFORMATION TECHNOLOGY (IT) BUDGET REQUEST BY IT INVESTMENT AND STRATEGIC OBJECTIVE FEDERAL HIGHWAY ADMINISTRATION Appropriations, Obligation Limitations, and Exempt Programs (\$000)

APPROPRIATION/PROGRAM ACTIVITY/PERFORMANCE <u>GOAL</u>	<u>SAFETY</u>	REDUCED CONGESTION	<u>GLOBAL</u> <u>CONNECTIVITY</u>	<u>ENVIRON.</u> STEWARD.	<u>SECURITY</u>	ORG. EXCELL.	<u>TOTAL</u>
Part 1. IT Systems by Mission Area	\$1,180	\$6,578	\$71	\$550	\$151	\$7,857	\$16,387
Part 2. IT Infrastructure and Office							
Automation	\$2,739	\$8,218	\$1,201	\$1,538	\$3,265	\$11,509	\$28,470
Part 3. Enterprise Architecture &							
Planning	\$64	\$64	\$0	\$64	\$64	\$384	\$640
Part 4. Grants Management	\$0	\$519	\$0	\$0	\$0	\$2,075	\$2,594
Part 5. IT Grants to State and Locals	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$3,983	\$15,379	\$1,272	\$2,152	\$3,480	\$21,825	\$48,091
	8.28%	31.98%	2.64%	4.47%	7.24%	45.38%	

Note: Includes consolidated investments.

FY 2007 BUDGET REQUEST RECAP BY ACCOUNT FEDERAL HIGHWAY ADMINISTRATION Budget Authority (\$000)

ACCOUNT	FY 2006 <u>ACTUAL</u>		FY 2007 CONTINUING <u>RESOLUTION</u>		FY 2007 PRESIDENT'S <u>BUDGET</u>	FY 2008 <u>REQUEST</u>	
Federal-aid Highways							
Contract Authority (subject to limitation)	36,502,441	1/	40,566,078	1/	40,212,949	41,575,432	
Equity Bonus Adjustment			105,172				
Revenue Aligned Budget Authority (RABA)			842,254		842,254	630,976	
RABA Transfer to FMCSA					- 3,502		
Exempt Contract Authority	739,000		739,000		739,000	739,000	
TIFIA Upward Reestimate	1,911		7,099				
Cancellation of Contract Authority	[-383,752]		- 416,312			- 630,976	
Cancellation of Unobligated Balance	[-3,845,362]		- 3,845,362			- 1,369,000	3/
[Congestion Initiative]						[175,000]	
Subtotal Federal-aid Highways	37,243,352	•	37,997,929		41,790,701	40,945,432	-
Emergency Relief Program - P.L. 109-148 & 109-234 (GF)	3,452,363						
Appalachian Development Highway Systems (GF)	19,800		82,332				
Miscellaneous Appropriations (GF)	153		1,328				
Miscellaneous Appropriations (GF) Unobligated balance rescission						- 149,000	3/
Miscellaneous Highway Trust Funds - Unobligated Balance Rescission						- 260,469	3/
Miscellaneous Trust Funds	49,851		300,000		300,000	300,000	
[Right-of-Way Revolving Fund (TF)]	10,687	2/					
TOTALS	40,776,206		38,381,589		42,090,701	40,835,963	
[Discretionary]	3,472,316		- 4,072,842			- 2,409,445	
[Mandatory]	37,303,890		42,454,431		42,090,701	43,245,408	
ROPRIETARY AND OTHER GOVERNMENTAL RECEIPTS							
Advances from State Cooperating, Other Fed. Agencies, and Foreign Gov.	44,963		27,000		27,000	27,000	
Contributions for Highway Research Programs	1,010		12,000		12,000	12,000	
Miscellaneous Trust Funds	930		14,000		14,000	14,000	
Advances from Other Federal Agencies	2,000		247,000		247,000	247,000	
TOTAL	48,903		300,000		300,000	300,000	

[] Non-add

1/ Reflects \$121 million transfer to NHTSA per P.L. 109-115. FY 2006 includes reduction of flex funding transfer to FTA of \$1,368 million.2/ Loan forgiveness per Section 1915 of P.L. 109-59.

3/ Cancellation of unobligated balances in FY 2008.

FY 2008 BUDGET REQUEST RECAP BY ACCOUNT FEDERAL HIGHWAY ADMINISTRATION Outlays (\$000)

<u>ACCOUNTS</u>	FY 2006 <u>ACTUAL</u>	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	FY 2008 <u>REQUEST</u>
Federal-aid Highways	32,840,178	33,226,106	36,783,617	37,019,119
Subject to Obligation Limitation	31,355,261	31,716,022	35,229,648	35,612,519
Exempt	1,004,834	982,298	970,236	975,106
TIFIA Reestimate	1,911	7,099		
Emergency Relief Supplementals	478,172	520,688	583,733	431,494
Emergency Relief Program (GF)	849,153	1,437,874	1,128,000	586,402
Appalachian Development Highway System (TF)	1,554	4,134	3,593	4,423
Appalachian Development Highway System (GF)	95,070	138,754	129,334	126,398
Miscellaneous Appropriations	187,445	117,510	147,106	41,162
Miscellaneous Highway Trust Funds	144,516	140,133	179,727	10,676
Miscellaneous Trust Funds	71,839	309,429	370,000	363,960
Highway Related Safety Grants (TF)		197	139	143
State Infrastructure Banks	1,449	983	1,052	709
Right-of-Way Revolving Fund (TF)	619 1/			
TOTALS	34,191,823	35,375,121	38,742,568	38,152,992
[Mandatory]	1,079,198	1,298,826	1,340,236	1,339,278
[Discretionary]	33,112,625	34,076,295	37,402,332	36,813,714

[] Non-add

1/ Loan forgiveness per Section 1915 of P.L. 109-59.

FEDERAL HIGHWAY ADMINISTRATION Appropriations, Obligation Limitations, and Exempt Programs (\$000)

LIMITATION ON ADMINISTRATIVE EXPENSES

	2007 Estimate (Continuing Resolution)	Annualization 2007 Pay Raise	2008 Pay Raise	GSA Rent	WCF Increase / Decrease		FY 2007 Adjusted Base	Program Increases/ Decreases	2008 PC&B Program Increase	SAFETEA-LU FY2008 Request	Percentage of Total FY 2008 Request
OPERATIONS PERSONNEL RESOURCES (FTE)	<u>2,215</u>						<u>2,215</u>		<u>215</u>	<u>2,430</u>	
FINANCIAL RESOURCES											
Salaries and Benefits	\$248,628	\$1,800	\$4,501				\$254,929		\$15,226	\$270,155	70.25%
Travel	\$9,694						\$9,694			\$9,694	2.52%
Transportation	\$1,099						\$1,099			\$1,099	0.29%
GSA Rent	\$26,418			\$498			\$26,916			\$26,916	7.00%
Rent, Communications & Utilities	\$3,834						\$3,834			\$3,834	1.00%
Printing	\$1,192						\$1,192			\$1,192	0.31%
Other Services:											
-WCF	\$15,208				\$1,539		\$16,747			\$16,747	4.35%
-Other	\$46,654						\$46,654			\$46,654	12.13%
Supplies	\$1,955						\$1,955			\$1,955	0.51%
Equipment	\$6,310						\$6,310			\$6,310	1.64%
Total, Limitation of Administrative Expenses ARC	\$360,992 \$3,000	\$1,800	\$4,501	\$498	\$1,539	\$0	\$369,330 \$3,000	\$0	\$15,226	\$384,556 \$3,000	100%
OIG	\$3,524						\$3,524			\$3,524	
GRAND TOTAL, CONTRACT AUTHORITY	\$367,516	\$1,800	\$4,501	\$498	\$1,539	\$0	\$375,854	\$0	\$15,226	\$391,080	100%

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION PERSONNEL RESOURCE--SUMMARY TOTAL FULL-TIME EQUIVALENTS

DIRECT FUND, BY APPROPRIATION	FY 2006 ACTUAL	FY 2007 CONTINUING RESOLUTION	FY 2007 PRESIDENT'S BUDGET	FY 2008 REQUEST
Limitation, General Operating Expenses	2,215	2,215	2,430	2,430
SUBTOTAL, DIRECT FUNDED	2,215	2,215	2,430	2,430
REIMBURSEMENT/ ALLOCATIONS/OTHERS				
Federal-aid Highways ('000') Reimbursable	333	333	533	333
Misc. Trust Fund	39	39	34	39
Reimbursements, Direct Construction	215	215	14	215
Allocations From Other Agencies, Subtotals			33	
SUBTOTAL, REIMBURSEMENTS/ALLOCATIONS/OTHER	587	587	614	587
TOTAL FTEs	2,802	2,802	3,044	3,017

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION RESOURCE SUMMARY - STAFFING TOTAL FULL-TIME PERMANENT POSITIONS

DIRECT FUND, BY APPROPRIATION	FY 2006 ACTUAL	FY 2007 CONTINUING RESOLUTION	FY 2007 PRESIDENT'S BUDGET	FY 2008 REQUEST
Limitation, General Operating Expenses	2,215	2,215	2,430	2,430
SUBTOTAL, DIRECT FUNDED	2,215	2,215	2,430	2,430
REIMBURSEMENT/ ALLOCATIONS/OTHERS				
Federal-aid Highways ('000')	333	333	533	333
Misc. Trust Fund	39	39	34	39
Reimbursements, Direct Construction	215	215	14	215
Allocations From Other Agencies			33	
SUBTOTAL, REIMBURSEMENT/ALLOCATION/OTHERS	587	587	614	587
TOTAL POSITIONS	2,802	2,802	3,044	3,017

FEDERAL HIGHWAY ADMINISTRATION HISTORICAL FUNDING LEVELS (1997-2006) (\$ in Thousands)

Federal-Aid Highways	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u> <u>2/</u>	<u>FY 2004 3/</u>	<u>FY 2005</u> <u>4/</u>	<u>FY 2006</u> <u>5/</u>
Obligation Limitation 1/	\$18,921,140	\$21,500,000	\$25,511,000	\$27,520,032	\$29,596,176	\$31,799,104	\$31,800,000	\$33,843,000	\$34,422,400	\$36,032,344
Liquidation of Contract Authority (C.A.)	\$19,800,000	\$20,800,000	\$24,000,000	\$26,000,000	\$28,000,000	\$30,000,000	\$32,000,000	\$34,000,000	\$35,000,000	\$36,032,344
Emergency Relief Funds (C.A.)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Supplemental Emergency Relief Funds	\$732,000	\$259,000	\$0	\$0	\$718,416	\$242,000	\$0	\$0	\$1,943,000	\$3,452,363
	. ,				. ,	. ,			.,,,	.,,
State Infrastructure Banks	\$150,000	\$0	-\$6,500	\$0	\$0	-\$5,750	\$0	\$0	\$0	\$0
Appalachian Development Highway System (GF)	\$0	\$300,000	\$132,000	\$0	\$0	\$200,000	\$188,000	\$125,000	\$80,000	\$20,000
Appalachian Development Highway System (TF)	\$0	\$0	\$0	\$0	\$254,402	\$0	\$0	\$0	\$0	\$0
LGOE/LAE - (Non Add within Federal-Aid)	<u>\$519,089</u>	\$551,656	\$324,767	\$304,355	<u>\$294,470</u>	\$310,159	\$316,126	\$337,604	\$346,500	<u>\$364,638</u>
Admin Expenses - LGOE	248,131	258,948	271,392	304,355	294,470	310,159	316,126	337,604	346,500	364,638
Admin Expenses - Motor Carrier Safety	49,000	51,000	53,375	0	0	0	0	0		
GOE Contract Programs	221,958	241,708	0	0	0	0	0	0	0	0
Motor Carrier Safety Grants										
Obligation Limitation	\$77,914	\$84,825	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Liquidation of Contract Authorization	\$74,000	\$85,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous Appropriations	\$0	\$0	\$200,000	\$0	\$604,667	\$148,300	\$90,600	\$4,000	\$0	\$0
Miscellaneous Highway Trust Fund	\$0	\$0	\$0	\$1,500	\$1,182,493	\$100,000	\$285,000	\$50,000	\$34,000	\$0

Note: This table reflects actual enacted amounts as appropriated.

1/ Does not reflect \$1.647 billion transferred to Federal Transit Administration in FY 2000, \$1.291 billion in FY 2001, \$1.175 billion in FY 2002, \$1.067 billion in FY 2003, \$1.022 billion in FY 2004, \$1.005 billion in FY 2005, \$1.383 billion in FY 2006.

2/ Does not reflect the following rescissions in FY 2003: Federal-aid \$206.700 million, LAE \$ 2.055 million, Appalachian Dev. Hwy. Sys. \$1.222 million, Misc. Appropriations \$.589 thousand, and Misc. Hwy. Trust Funds \$1.853 million.

3/ Does not reflect the following rescissions in FY 2004: Federal-aid \$207 million, LAE \$3,989 million, ADHS \$738 thousand, Misc. Appropriations \$21 thousand, and Misc. Hwy. Trust Funds \$295 thousand.

4/ Does not reflect the following rescissions in FY 2005: LAE \$2.8 million, Appalachian Dev. Hwy. Sys. \$.640 million, Misc. Hwy Trust Funds \$.272 million.

5/ Does not reflect the following rescissions in FY 2006: Federal-aid \$360 million, LAE \$3.6 million, Appalachian Dev. Hwy. Sys. \$.200 million.

FEDERAL-AID HIGHWAYS Appropriations, Obligation Limitations, and Exempt Obligations (\$000)

ACCOUNTS	FY 2006 <u>ACTUAL</u>	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	FY 2008 <u>REQUEST</u>
[Limitation on administrative expenses]	[360,992]	[360,992]	[372,504]	[384,556]
Federal-aid Highways Obligation Limitation	(34,183,033) 1/	(35,550,788) 1/	(38,244,211)	(39,585,075)
Revenue Aligned Budget Authority - RABA			(842,254)	
RABA transfer to FMCSA			-(3,502)	
Subtotal, Obligation Limitation	(34,183,033)	(35,550,788)	(39,082,963)	(39,585,075)
Exempt Programs	739,000	739,000	739,000	739,000
Subtotal, Obligation Limitation & Exempt Contract Authority	34,922,033	36,289,788	39,821,963	40,324,075
Contract authority (Equity Bonus adjustment)		105,172		
Cancellations of new contract authority	[-383,752] 2/	-416,347 2/		-630,976
Cancellations of unobligated balances of contract authority	[-3,845,363] 3/	-3,845,363 3/		-1,369,000
[Congestion Initiative]				[175,000]
TOTALS	34,922,033	32,133,250	39,821,963	38,324,099
FTEs				
Limitation on Adminstrative Expenses	2,215	2,215	2,430	2,430
Federal Aid Reimbursable	587	587	619	587

Program and Performance Statement

This account provides necessary resources to the Federal-aid Highways program. These funds aid in the development, operations, and management of an intermodal transportation system that is economically efficient. It also provides the necessary resources to support and maintain the agency's administrative infrastructure.

[] Non-add

1/ Reflects \$121 million transfer to NHTSA per P.L. 109-115. FY 2006 reflects \$1,368 million flex funding transfer to FTA.

2/ Cancellation of new contract authority.

3/ Cancellation of unobligated balances.

FEDERAL-AID HIGHWAYS Summary Analysis of Change From FY 2007 to FY 2008 Appropriations, Obligation Limitations, and Exempt Obligations

(\$000)

	Change from	FY 2008	FY 2008	FY 2008	
Item	FY 2007 Pres. Bud.	PC&B by	FTEs by	Contract	
	to FY 2008	Program	Program	Expenses	Total
FY 2007 Base		No	te: Columns are Non-	Add	
Federal-aid Highways					\$39,821,963
Adjustment to Base					
Federal-aid Hwys					
New or Expanded Programs					
Federal-aid Hwys	-\$1,497,864			-1,497,864	
Total Adjustment to Base					-1,497,864
FY 2008 Request [Ob. Lim. + Exempt]					\$38,324,099

1/ Marginal cost explanation within Section 4 narrative.

FEDERAL-AID HIGHWAYS (LIMITATION ON OBLIGATIONS) (HIGHWAY TRUST FUND)

None of the funds in this Act shall be available for the implementation or execution of programs, the obligations for which are in excess of \$39,585,075,404 for Federal-aid highways and highway safety construction programs for fiscal year 2008: Provided, That within the \$39,585,075,404 obligation limitation on Federal-aid highways and highway safety construction programs, not more than \$429,800,000 shall be available for the implementation or execution of programs for transportation research (chapter 5 of title 23, United States Code; sections 111, 5505, and 5506 of title 49, United States Code; and title 5 of Public Law 109–59) for fiscal year 2008: Provided further, That this limitation on transportation research programs shall not apply to any authority previously made available for obligation: Provided further, That the Secretary may, as authorized by section 605(b) of title 23, United States Code, collect and spend fees to cover the costs of services of expert firms, including counsel, in the field of municipal and project finance to assist in the underwriting and servicing of Federal credit instruments and all or a portion of the costs to the Federal government of servicing such credit instruments: Provided further, That such fees are available until expended to pay for such costs: Provided further, That such amounts are in addition to administrative expenses that are also available for such purpose, and are not subject to any obligation limitation or the limitation on administrative expenses under section 608 of title 23, United States Code.

(CANCELLATION)

Notwithstanding section 110 of title 23, United States Code, for fiscal year 2008, the Secretary shall not allocate contract authority made available under section 110 of such title: Provided, That the amount of revenue aligned budget authority determined in accordance with such section for fiscal year 2008 is cancelled.

(CANCELLATION)

Of the unobligated balances of contract authority apportioned to each State under chapter 1 of title 23, United States Code, \$1,317,000,000 are cancelled: Provided, That such cancellation shall not apply to the contract authority distributed in accordance with 23 U.S.C. 130(f), 23 U.S.C. 133(d)(1) as in effect prior to the date of enactment of Public Law 109-59, the first sentence of 23 U.S.C. 133(d)(3)(A), 23 U.S.C. 104(b)(5), or 23 U.S.C. 163 as in effect prior to the enactment of Public Law 109-59.

(INCLUDING CANCELLATION)

(a) Of the unobligated balances of funds made available under sections 1103(b), 1104(b), 1105(f), 1105(h), 1106(a), 1106(b), 1107(b), 1108(b), and 4008(j) of Public Law 102-240 and section 6023(b) of Public Law 102-240 (adding paragraph (10)(C) to section 11(b) of the Federal Transit Act), up to \$175,000,000 shall be available to the

Secretary of Transportation to carry out the National Strategy to Reduce Congestion on America's Transportation Network: Provided, That of such funds, \$100,000,000 shall be available to advance Urban Partnership Agreements with selected States under the Value Pricing Pilot Program (section 1012(b) of Public Law 102-240, as amended), \$25,000,000 shall be available to support the Corridors of the Future investments, \$25,000,000 shall be available to support the Real-Time System Management Information Program (section 1201 of Public Law 109-59), and \$25,000,000 shall be available to expand congestion-related research activities under the Intelligent Transportation Systems Research and Development program: Provided further, That funds available pursuant to this section shall remain available for obligation until September 30, 2010, and shall not be subject to any limitation on obligations for Federalaid highways and highway safety construction programs set forth in this Act or any other act: Provided further, That the Federal share payable on account of any program, project, or activity carried out with funds made available under this section may be up to 100 percent.

(b) After funds are made available in accordance with subsection (a), of the remaining unobligated balances of such funds, \$52,000,000 are cancelled.

(LIQUIDATION OF CONTRACT AUTHORIZATION) (HIGHWAY TRUST FUND)

Notwithstanding any other provision of law, for carrying out the provisions of title 23, United States Code, that are attributable to Federal-aid highways, not otherwise provided, including reimbursement for sums expended pursuant to the provisions of 23 U.S.C. 308, \$38,000,000,000 or so much thereof as may be available in and derived from the Highway Trust Fund (other than the Mass Transit Account), to remain available until expended.

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.

Detailed Justification for Federal-aid Highways (in thousands of dollars)

Federal-aid Highways (Ob. Lim.	FY 2008 Request:	\$40,324,075
and Exempt Contract Authority)	FY 2007 President's Budget:	\$39,821,962
	FY 2007 Continuing Resolution:	\$36,289,788

Overview:

The Federal Highway Administration (FHWA) is charged with the broad responsibility of ensuring that America's roads and highways continue to be the safest and most technologically up-to-date. Although State, local, and tribal governments own most of the Nation's highways, the Federal-aid Highway Program (FAHP) provides Federal financial resources and technical assistance to State and local governments for constructing, preserving, and improving the National Highway System, a 163,000-mile network that carries 40 percent of the Nation's highway traffic. The program also provides resources for one million additional miles of urban and rural roads that are not on the System, but that are eligible for Federal-aid.

Title 23 of the United States Code and other supporting legislation provide authority for the various activities of the FHWA. Surface transportation authorizing legislation provides upper limits of funding of contract authority, with program levels established by annual limitations on obligations set in appropriations acts. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorized \$193.1 billion for the FAHP for fiscal years 2005-2009. The annual budget of approximately \$40 billion is funded by fuel and motor vehicle excise taxes.

Funding proposed for the FAHP in 2008 is consistent with the base levels authorized in SAFETEA-LU and will be used to deliver the programs and projects envisioned in the authorizing legislation.

FY 2007 Base:

The budget reflects a full year Continuing Resolution (CR) level for the Federal-aid highway program in FY 2007, totaling \$36.3 billion in budgetary resources, equal to the level enacted in FY 2006. The CR level includes an obligation limitation of \$35.6 billion for FAH programs and \$739 million in exempt contract authority (\$639 million for Equity Bonus and \$100 million for Emergency Relief). In addition, under the CR, \$4.3 million in cancellations of new and unobligated balances of contract authority enacted in FY 2006 would continue in FY 2007.

For the purpose of this budget presentation, the FY 2007 base reflects the CR level. The CR level is \$3.5 billion less than the FY 2007 President's Budget request, which reflects total budgetary resources of \$39.8 billion. The FY 2007 President's Budget reflected an obligation limitation of \$39.1 billion (including \$842 million for revenue aligned budget authority (RABA)) for FAH programs and \$739 million in exempt contract authority, consistent with the levels authorized in SAFETEA-LU.

In FY 2007, FHWA will continue to implement the provisions of SAFETEA-LU and enhance efforts to increase oversight and accountability to ensure the protection of the large Federal investment, while maintaining the prerogatives of the States in the delivery of highway transportation projects to the public.

Anticipated FY 2007 Accomplishments:

FY 2007 funding will enable the FHWA to implement the programs authorized in SAFETEA-LU while working toward accomplishing the strategic goals and objectives of the Department and the Agency. The following summarizes anticipated accomplishments to achieve the Agency's performance goals (please refer to Section 4 of the budget for additional performance information and anticipated accomplishments). Specific program funding levels for FY 2007 are detailed in the FY 2008 request section.

<u>Safety</u>

The FHWA will continue to deliver technical assistance, training, and public awareness programs to advance priorities in the delivery of national safety programs. FY 2007 funding, including approximately \$1 billion for the Highway Safety Improvement Program, will be used for a full range of highway safety related program efforts including: the implementation of new SAFETEA-LU provisions; redesign and construction of roadways and intersections to eliminate hazards; installation of safety improvement countermeasures, such as guardrails and rumble strips; and collecting crash and other safety-related data. Funds will also be used to assist state and metropolitan areas in developing plans and policies to improve safety and to educate decision makers within the transportation planning process on the importance of safety.

Reduced Congestion

In 2007, the FHWA plans to fund transportation-related improvements that address traffic congestion in critical areas. Over \$20 billion in funding apportioned to the States through the Surface Transportation, National Highway System, Interstate Maintenance, and Bridge Programs will contribute to improving mobility and infrastructure. States will increase the capacity of the highway system, remove bottlenecks, accelerate the deployment of Intelligent Transportation System (ITS) technologies, develop the next generation of system operational capabilities, support the creations of needed institutional arrangements, and increase the use of effective operational strategies and techniques. Funding will also support long-term research in operations and ITS and will be used to fund public education, technical assistance, and training to partner agencies and transportation system users.

FHWA will continue to fund transportation-related improvements in States to maintain and improve the National Highway System (NHS), including the Interstate system and non-NHS, and replace, rehabilitate, and preserve bridges and other infrastructure. Funds will also be used to build needed transportation facilities, support long-term research, and provide public education, technical assistance, and training to partner agencies and transportation system users. In addition, FHWA will be able to fund the clean up, repair, restoration and/or reconstruction of highway facilities damaged during natural and man made disasters.

Also in FY 2007, Transportation Infrastructure Finance and Innovation (TIFIA) credit assistance will continue to support projects that otherwise might have difficulty in obtaining financing in existing capital markets.

Global Connectivity

FHWA will fund the development and dissemination of the analytic capability and professional capacity needed by Federal, State, international and private sector partners to understand freight movement, support U.S. foreign policy priorities and initiatives including expanded opportunities and access for U.S. transportation industry, and support the FHWA's efforts to coordinate highway transportation infrastructure and operations with planned changes at U.S. land borders. This includes data analysis tools, network performance metrics, improved freight modeling capability, professional capacity building, continuation of grants for both multi-state corridor and border efforts, linkages between investment decisions and impacts on land ports of entry, linkages between freight transportation and our national and regional economies, and improved bi-national planning. States and Metropolitan Planning Organizations (MPOs) will also use these resources to improve freight movement into and through major trade transport gateways and hubs, improve the transportation infrastructure that connects these gateways to the Nation's mainline transportation networks, and relieve congestion related to high levels of truck traffic.

Environmental Stewardship

In 2007, the FHWA will fund transportation improvement projects in States to help reduce mobile source emissions and adverse environmental effects. Funding, including \$1.7 million for the Congestion Mitigation and Air Quality (CMAQ) Improvement program, will also be used for research, technical assistance, and public education initiatives to improve air quality.

The FHWA and States will protect and enhance the Nation's wetlands and aquatic resources, helping the FHWA to achieve its goal of conservation of natural habitats and ecosystems, protect wildlife populations while enhancing safety and reduce impacts on land and water resources. The number of Exemplary Ecosystem Initiatives undertaken will be the primary measure demonstrating accomplishment in environmental stewardship.

Funds will also be used for research, technical assistance, and public education initiatives to support further implementation of exemplary ecosystem and habitat conservation initiatives. These activities are consistent with congressional directives to develop rapid methods of ecosystem impact assessment and enhance the scenic beauty of highways.

The FHWA will implement environmental streamlining activities that encourage States and resource agencies to establish and meet timelines for all projects with an Environmental Impact Statement or Environmental Assessment, use the Executive Order 13274 to resolve obstacles to environmental review early and develop new streamlined procedures, promote widespread implementation of environmental stewardship during project development through Context Sensitive Solutions (CSS), and promote processes that integrate environment and transportation decision making in more States. In addition, funding will serve as a surrogate for measuring implementation of the SAFETEA-LU environmental process provisions.

Security, Response, and Preparedness

The FHWA will work with the State departments of transportation to implement critical security enhancement activities in the areas of critical infrastructure vulnerability assessments and countermeasure deployment; emergency operations, preparedness and response; freight and border security operations; and national defense mobility using the Strategic Highway Network.

The FHWA will to continue to address state and local needs in recovering from natural and man-made disasters, to provide technical assistance and guidance to Federal-aid Highway Program fund recipients on strategies designed to protect critical transportation infrastructure from attack as well as in responding to emergencies of all types.

Organizational Excellence

The FHWA will contribute to the DOT Organizational Excellence strategic objective to implement the reform initiatives in the President's Management Agenda (PMA), including activities contributing to the goal to achieve strategic management of human capital, competitive sourcing goals, financial performance goals, budget and performance integration goals, and e-government goals. The FY 2007 CR level would fund a Limitation on Administrative Expenses of \$361.0 million to accomplish FHWA's Organizational Excellence performance goals.

FY 2008 Budget Request:

The FY 2008 budget request totals \$40.3 billion for the Federal-aid Highway Program (FAHP). This funding reflects the base level authorized in SAFETEA-LU and includes an obligation limitation of \$39.6 billion for FAH programs and \$739 million in exempt contract authority (\$639 million for Equity Bonus and \$100 million for Emergency Relief). The budget does not propose an increase to the obligation limitation for the revenue aligned budget authority (RABA) adjustment.

The FY 2008 request includes an obligation limitation of \$429.8 million for research programs and a Limitation on Administrative Expenses of \$384.6 million. In addition, the

budget proposes \$175 million for Congestion Initiative activities in support of the Department-wide *National Strategy to Reduce Congestion on America's Transportation Network*, to be funded by reprogramming unobligated balances of Federal-aid highway program inactive demonstration and other projects. The budget request also proposes \$2.0 billion in cancellations of new and unobligated balances of FAH contract authority.

The budget supports the Department's goals and policy initiatives, and the Agency's priorities of improving highway safety, minimizing project delays, reducing traffic congestion, and promoting environmental stewardship. In FY 2008, the FHWA will continue to implement highway programs authorized in SAFETEA-LU, undertake efforts to improve financial stewardship and oversight, and carry out the President's Management Agenda.

Authorized contract authority and estimated obligation limitation amounts for FAH programs in FY 2007 and 2008 are detailed below. FY 2007 reflects estimated amounts under a full year CR. [Note: Amounts are net of authorized set-asides and takedowns. FY 2007 obligation limitation amounts do not include RABA adjustment].

	(in thousand	ds of dollars)
Surface Transportation Program	<u>FY 2007</u>	FY 2008
Contract Authority	\$6,339,564	\$6,371,818
Obligation Limitation (Est.)	\$4,887,757	\$6,047,753

The Surface Transportation Program (STP) provides flexible funding that may be used by States and localities for projects on any Federal-aid highway, including the NHS, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities. Program eligibilities include advanced truck stop electrification systems, high accident/high congestion intersections, and environmental restoration and pollution abatement, control of noxious weeds and aquatic noxious weeds, and establishment of native species. Funds will be distributed among the States based on lane-miles of Federal-aid highways, total vehicle-miles traveled on those Federal-aid highways, and estimated contributions to the Highway Account of the Highway Trust Fund (HTF). Each State must set aside a portion of their STP funds (10 percent or the amount set aside in 2005, whichever is greater) for transportation enhancements activities.

National Highway System	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$6,019,475	\$6,050,338
Obligation Limitation (Est.)	\$4,640,971	\$5,742,624

The National Highway System is a 163,000-mile system of significant rural and urban roads serving major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. It includes the Interstate System, other urban and rural principal arterials, highways that provide motor vehicle access between the NHS and major intermodal transportation facilities, the defense strategic highway network, and strategic highway network connectors. The NHS program provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also

be used to fund transit improvements in NHS corridors. The formula to distribute funding is based on lane-miles of principal arterials (excluding Interstate), vehicle-miles traveled on those arterials, diesel fuel used on the State's highways, and per capita principal arterial lane-miles.

Interstate Maintenance	<u>FY 2007</u>	FY 2008
Contract Authority	\$4,929,198	\$4,954,606
Obligation Limitation (Est.)	\$3,800,376	\$4,702,620

Under SAFETEA-LU, the 46,000 mile Dwight D. Eisenhower National System of Interstate and Defense Highways retains a separate identity within the NHS. The Interstate Maintenance (IM) program was established under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to provide for the on-going work necessary to preserve and improve Interstate highways. The IM program provides funding for resurfacing, restoring, rehabilitating and reconstructing (4R) most routes on the Interstate System. Funding will be distributed by formula based on each State's lane-miles of Interstate routes open to traffic, vehicle-miles traveled on those routes, and contributions to the Highway Account of the Highway Trust Fund attributable to commercial vehicles.

Bridge Program	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$4,211,748	\$4,233,515
Obligation Limitation (Est.)	\$3,247,227	\$4,018,202

The Highway Bridge Program provides funding to enable States to improve the condition of their highway bridges through replacement, rehabilitation, and systematic preventive maintenance. Funding is provided to States to improve the condition of their eligible highway bridges over waterways, other topographical barriers, other highways and railroads. Each State must spend at least 15% of its bridge apportionment for bridges on public roads that are not Federal-aid highways (off-system bridges).

Congestion Mitigation and Air Quality Improvement	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$1,718,513	\$1,727,235
Obligation Limitation (Est.)	\$1,324,961	\$1,639,390

The Congestion Mitigation and Air Quality Improvement (CMAQ) Program provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide (CO), and particulate matter (PM-10, PM-2.5) which reduce transportation related emissions. CMAQ provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). The formula for distribution of funds considers an area's population by county and the severity of its ozone and carbon monoxide problems within the nonattainment or maintenance area, with greater weight given to areas that are both carbon monoxide and ozone nonattainment/maintenance areas.

Highway Safety Improvement Program	FY 2007	FY 2008
Contract Authority	\$1,050,888	\$1,055,929
Obligation Limitation (Est.)	\$810,227	\$1,002,226

SAFETEA-LU authorized a new core Federal-aid funding program beginning in FY 2006 to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The Highway Safety Improvement Program (HSIP) provides flexibility to allow States to target funds to their most critical safety needs. Of the funding authorized for HSIP, a portion is set aside for the Railway-Highway Crossing program, with the remainder to be distributed by formula based on each State's lane miles, vehicle miles traveled, and number of fatalities, a portion of which is to be set aside annually for construction and operational improvements on high-risk rural roads. The HSIP requires States to develop and implement a strategic highway safety plan and submit annual reports to the Secretary that describe at least 5% of their most hazardous locations, progress in implementing highway safety improvement projects, and their effectiveness in reducing fatalities and injuries.

Equity Bonus	FY 2007	<u>FY 2008</u>
Contract Authority	\$8,136,500	\$8,536,197
Obligation Limitation (Est.)	\$6,849,024	\$8,203,773

The Equity Bonus provides funding to States based on equity considerations. These include a minimum rate of return on contributions to the Highway Account of the Highway Trust Fund, and a minimum increase relative to the average dollar amount of apportionments under SAFETEA-LU. Selected States are guaranteed a share of apportionments and High Priority Projects not less than the State's average annual share under SAFETEA-LU. This program replaces the Transportation Equity Act for the 21st Century's (TEA-21's) Minimum Guarantee program.

Federal Lands Highways	FY 2007	<u>FY 2008</u>
Contract Authority	\$892,107	\$954,000
Obligation Limitation (Est.)	\$722,584	\$908,208

The Federal Lands Highways program (FLHP) provides funding for Indian Reservation Roads (IRR), Park Roads and Parkways, Public Lands Highways (discretionary and Forest Highways), and Refuge Roads programs. Funding can be used for transportation planning, research, engineering, and construction of highways, roads, and parkways and transit facilities that proved access to or within public lands, national parks, and Indian reservations. In addition, FLHP funds can be used as the State or local match for most types of Federal-aid highway funded projects. Eligible uses of Public Lands Highways funds include up to \$20 million per year for maintenance of Forest Highways, \$1 million per year for signage identifying public hunting and fishing access, and \$10 million by the Secretary of Agriculture to facilitate the passage of aquatic species beneath roads in the National Forest System.

High Priority Projects	FY 2007	FY 2008
Contract Authority	\$2,987,405	\$2,966,400
Obligation Limitation (Est.)	\$2,419,870	\$2,824,013
The High Priority Projects Program provides designated fur identified in SAFETEA-LU. A total of 5,091 projects are ide amount of funding over the 5 years of SAFETEA-LU.	0 1 1	
Projects of Regional or National Significance	FY 2007	FY 2008
Contract Authority	\$447,899	\$444,750
Obligation Limitation (Est.)	\$362,809	\$423,402
The Projects of National and Regional Significance program high cost projects of national or regional importance. Bene economic productivity, facilitating international trade, relie safety.	fits could include in	nproving
National Corridor Infrastructure		
Improvement Program	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$490,448	\$487,000
Obligation Limitation (Est.)	\$397,275	\$463,624
The National Corridor Infrastructure Program is a discretion for construction of highway projects in corridors of national growth and international or interregional trade. This program the National Corridor Planning and Development program.	l significance to pro	mote economic
Transportation Improvements	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$643,332	\$638,809
Obligation Limitation (Est.)	\$521,115	\$608,146
The Transportation Improvements program provides design identified in SAFETEA-LU. A total of 466 projects are iden amount of funding over the 5 years of SAFETEA-LU.		
Appalachian Development Highway System	<u>FY 2007</u>	FY 2008
Contract Authority	\$463,631	\$470,000
Obligation Limitation (Est.)	\$382,032	\$447,440
The Appalachian Development Highway System (ADHS) Program continues funding for the construction of the Appalachian corridor highways in 13 States to promote economic development and to establish a State-Federal framework to meet the needs of the region.		

Transportation, Community,		
and System Preservation Program	<u>FY 2007</u>	FY 2008
Contract Authority	\$51,012	\$61,250
Obligation Limitation (Est.)	\$49,965	\$58,310

The TCSP Program is intended to address the relationships among transportation, community, and system preservation plans and practices and identify private sector-based initiatives to improve those relationships. State and local governments, MPOs, and tribal governments are eligible for discretionary grants to carry out eligible projects to integrate transportation, community, and system preservation plans and practices. Funds must be equitably distributed to a diversity of populations and geographic regions.

Transportation Infrastructure Finance		
and Innovation (TIFIA)	FY 2007	<u>FY 2008</u>
Contract Authority	\$101,607	\$122,000
Obligation Limitation (Est.)	\$99,523	\$116,144

The TIFIA program provides Federal credit assistance to nationally or regionally significant surface transportation projects, including highway, transit and rail. The program is designed to fill market gaps and leverage substantial private co-investment by providing projects with supplemental or subordinate debt. TIFIA provides secured loans, loan guarantees, and lines of credit for surface transportation infrastructure projects of national or regional significance. An explicit goal of the TIFIA program is to induce private and non-Federal investment in transportation infrastructure. Eligibility extends to highway, transit, or railroad projects at least \$50 million in project costs or any ITS projects at least \$15 million in project costs. Projects can also include intermodal freight transfer facilities, international bridges or tunnels, and multi-state trade corridors.

Transportation and ITS Research	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$373,662	\$429,800
Obligation Limitation (Est.)	\$373,662	\$410,466

The purpose of the research and technology program is to develop new transportation technology that can be applied nationwide. The elements of the program include surface transportation research, development and deployment; University Transportation Research; training and education to develop and apply new technology; and other research-related programs. It will also support the continuation of the Bureau of Transportation Statistics' major programs to provide convenient access to transportation data and information and to conduct transportation surveys and analysis.

<u>\$3.6 million for the Global Positioning System Program</u>. As part of FHWA's research program, the Department of Transportation proposes to provide resources to the Department of Defense for assessment, development, acquisition, implementation, operation, and sustaining of additional designated Global Positioning System civil capabilities beyond the second and third civil signals already contained in the current Global Positioning System Program. FHWA requests the reprogramming of \$3.6 million

of unobligated balances of highway funds to be used to develop the new GPS L1C civil signal (modernized signal compatible with the EU Galileo Open Service signal on the new GPS III satellites), and for GPS Civil Signal Monitoring that entails software and hardware upgrades for global monitoring of all civil signals to include L1C/A, L2C, L5, and L1C.

Surface Transportation Research, Development and Deployment Contract Authority Obligation Limitation (Est.)	<u>FY 2007</u> \$169,159 \$169,159	<u>FY 2008</u> \$196,400 \$186,973
<u>Training and Education</u>	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$22,997	\$26,700
Obligation Limitation (Est.)	\$22,997	\$25,418
<u>University Transportation Research</u>	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$60,033	\$69,700
Obligation Limitation (Est.)	\$60,033	\$66,355
ITS Standards, Research and Development	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$94,743	\$110,000
Obligation Limitation (Est.)	\$94,743	\$104,720
<u>Bureau of Transportation Statistics</u>	<u>FY 2007</u>	<u>FY 2008</u>
Contract Authority	\$26,730	\$27,000
Obligation Limitation (Est.)	\$26,730	\$27,000
<u>Other Programs</u>	FY 2007	FY 2008
Contract Authority	\$2,980,381	\$2,071,786
Obligation Limitation (Est.)	\$2,348,615	\$1,968,734

This category includes the following programs: Recreational Trails, National Scenic Byways, Coordinated Border Infrastructure, Ferry Boats, Highway For Life Pilot, Highway Use Tax Evasion, Truck Parking Facilities, Delta Regional Transportation Development, Work Zone Safety, National Historic Covered Bridge Preservation, the Puerto Rico Highway Program, the Denali Access System, and other programs. An additional amount of obligation limitation for FY 2007 is set aside for allocated carryover.

<u>Equity Bonus (exempt)</u>	<u>FY 2007</u>	FY 2008
Contract Authority	\$639,000	\$639,000

A portion, \$639 million, of the Equity Bonus program described above is exempt from the obligation limitation.

Emergency Relief (exempt)	<u>FY 2007</u>	FY 2008
Contract Authority	\$100,000	\$100,000

The Emergency Relief (ER) program provides funds for the repair or reconstruction of Federal-aid highways and roads on Federal lands that have suffered serious damage as a result of natural disasters or catastrophic failure from an external cause. The regular ER program is funded by a permanent authorization of contract authority from the Highway Trust Fund with obligations not to exceed \$100 million per year, available until expended, and exempt from the Federal-aid highway obligation limitation under 23 USC 125.

In addition to the permanent authorization, SAFETEA-LU authorizes from the General Fund of the Treasury such sums as may be necessary to supplement the permanent authorization in years when ER allocations exceed \$100 million. No additional funding is requested in the FY 2008 budget.

Congestion Initiative	<u>FY 2007</u>	FY 2008
Contract Authority (non-add)	N/A	[\$175,000]

In support of the Department's *National Strategy to Reduce Congestion on America's Transportation Network*, the budget proposes to reprogram \$175 million in unobligated balances associated with Federal-aid highway program inactive demonstration and other projects. The \$175 million will be distributed in support of the Congestion Initiative as follows:

- <u>\$100 million for the Value Pricing Pilot Program</u>. The \$100 million would be in addition to the \$12 million authorized in SAFETEA-LU for the Value Pricing Pilot Program in FY 2008, bringing the total program to \$112 million. This infusion of funds would allow FHWA to accelerate progress in advancing the Urban Partnership Agreement track of the Congestion Initiative, which aims to implement pricing programs in selected metropolitan areas. The funding would be used to assist selected States in constituency building, outreach, program development, implementation and/or evaluation related to charging for the use of portions of their highway systems to better manage demand and enhance system performance.
- <u>\$25 million to support a new Corridors of the Future program</u>. These funds would be utilized on a discretionary basis by the Secretary to facilitate development of selected Corridors of the Future projects. These funds would be eligible for expenditure across the spectrum of project development including preliminary engineering, and purchasing of financial or environmental expertise. In addition, other preconstruction activities such as planning, feasibility analysis, revenue forecasting (for tolled facilities), and preliminary design work would be eligible expenses.
- <u>\$25 million for the Real-time System Management Information Program</u>. Funding to support the Real-time System Management Information Program (authorized in section 1201 of SAFETEA-LU) will be provided to State and local transportation agencies to plan or implement monitoring services collecting information relative to the program.

Activities will include: analyzing and revising regional ITS architectures to accommodate program requirements; planning and developing projects for acquiring monitoring services or integrating information from various services; conducting studies to identify and address issues related to using privately provided information services to satisfy program requirements; and developing communications portals to provide access to program information.

• <u>\$25 million for the ITS R&D program to expand congestion-related research activities</u>. These funds would support one or more new major ITS initiatives focused on reducing congestion. These major initiatives would include the research, development, and operational testing necessary to bring innovative, multi-modal solutions to the transportation marketplace. Areas to be explored would include: major advances in the acquisition and delivery of real-time traffic information; improved technology for identifying and responding to incidents; effective operational improvements to address traffic flow bottlenecks; and/or enhanced management techniques for controlling and balancing traffic flows along freeways and major arterials.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID HIGHWAYS

PROGRAM AND FINANCING SCHEDULE

in millions of dollars

Identifi	ication code:	FY 2006	FY 2007	FY 2008
	3-0-7-401	Actual	Estimate	Estimate
		Actual	Lotinate	Lotinate
Obliga	tions by Program Activity			
	Direct program:			
00.01	Programs subject to obligation limitation:		101	70
00.01	Direct loan subsidy [TIFIA]	4	121	79
00.02	Guarantee loan subsidy [TIFIA]		8	12
00.09	Administrative expenses [TIFIA]	2	2	2
00.10	Surface transportation program	7,860	8,288	
00.11	National highway system	6,420	-	
00.12	Interstate maintenance	4,306	-	5,525
00.13	Bridge program	3,910		
00.14	Congestion mitigation and air quality improvement	842	1,077	1,081
00.15	Highway Safety Improvement Programs	251	321	322
00.16	Equity Programs	2,131	2,524	
00.17	Federal lands highways	658	841	844
00.18	Appalachian development highway system	237	303	
00.19	High Priority Projects	1,009	2,536	
00.20	Projects of national and regional significance	99	433	
00.21	Transportation research	393		
00.22	Administration [Federal-aid highways]	360		385
00.23	Other programs	2,545	6,935	
00.91	Programs subject to obligation limitation	31,027	39,614	39,722
	Programs exempt from obligation limitation:			
02.11	Emergency relief program	34	192	123
02.13	Equity Programs	878	719	
02.14	Demonstration projects	8	92	49
02.15	Re-estimate on direct loan subsidy [TIFIA]	2	7	
02.91	Programs exempt from obligation limitation	922	1,010	
03.01	Emergency relief supplemental	400		
06.00	Total direct program	32,349	41,207	40,565
09.01	Reimbursable program	61	120	
10.00	Total obligations	32,410	41,327	40,685
Financ	ing:			
	tary resources available for obligation			
21.40	Unobligated balance carried forward, start of year	34,249	35,320	32,112
22.00	New budget authority (gross)	33,506		
22.21	Unobligated balance transferred to other accounts [69-8016]	-25		
23.90	Total budgetary resource available for obligation	67,730	73,439	
23.95	Total new obligations	-32,410	,	-40,685
23.98	Unobligated balance expiring or withdrawn	52,110	11,027	.0,00
24.40	Unobligated balance carried forward, end of year.	35,320	32,112	32,492
		55,520	52,112	,.,,

PROGRAM AND FINANCING SCHEDULE

	in millions of dollars			
	tion code:	FY 2006	FY 2007	FY 2008
69-8083-0	0-7-401	Actual	Estimate	Estimate
New bud	get authority (gross) detail:			
C	urrent:			
40.26	Appropriation	36,032	36,032	38,00
40.49	Portion applied to liquidate contract authority	-34,540	-35,911	-38,00
41.00	Transferred to other account (69-8016)	-121	-121	
41.00	Transferred to other account (69-8350)	-1,383		
42.00	Transferred from other account (69-8350)	12		
43.00	Appropriation (total discretionary)			
49.00	Contract authority		105	
49.35	Contract authority permanently reduced		-416	-63
49.36	Unobligated balances permanently reduced		-3,845	-1,36
49.90	Contract authority (total discretionary)		-4,156	-2,00
SI	pending authority from offsetting collections			
58.00	Offsetting collections, (cash)	43	120	12
58.10	Change in uncollected cust payments fr Fed Sources	65		
58.62	Transferred from other accounts [69-8350]	3		
58.90	Spending authority from offsetting collections	111	120	12
Μ	landatory			
60.26	Appropriation (trust fund)	2	7	
62.50	Appropriation (total)	2	7	
66.10	Contract authority	39,114	42,269	42,94
66.35	Contract authority permanently reduced	-384		
66.36	Unobligated balances permanently reduced	-3,845		
66.61	Transfer to other accounts [69-8350]	-1,383		
66.61	Transfer to other accounts [69-8016]	-121	-121	
66.62	Transfer from other accounts [69-8350]	12		
66.90	Contract authority (total)	33,393	42,148	42,94
70.00	Total new budget authority (gross)	33,506	38,119	41,06
Change i	n obligated balances			
72.40	Obligated balance, start of year	43,803	43,265	51,24
73.10	Total new obligations	32,410	41,327	40,68
73.20	Total outlays (gross)	-32,883	-33,347	
74.00	Chg in Uncollected cust orders fm Fed Sources (unexpired)	-65		
74.40	Obligated balance, end of year	43,265	51,245	54,79
Outlays (gross), detail (unexpired and expired)			
86.90	Outlays from new discretionary authority	9,272	9,719	10,80
86.93	Outlays from discretionary balances	22,604	22,638	25,36
86.97	Outlays from new mandatory authority	202	207	20
86.98	Outlays from mandatory balances	805	783	77
87.00 T	otal outlays (gross)	32,883	33,347	37,14
Offsets:				
Against g	ross budget authority and outlays			
0	ffsetting collections (cash) from:			
88.00	Federal sources	43	120	12
88.95	Portion of offsetting collection credited to unexpired accounts	65		
88.96	Portion of offsetting collection credited to expired accounts			
Net budg	et authority and outlays			
89.00 B	udget authority (net)	33,398	37,999	40,94
90.00 O	utlays (net)	32,840	33,227	37,02

OBJECT CLASSIFICATION in millions of dollars

in millions of dollars					
Identification code:	2006	2007	2008		
69-8083-0-7-401	Actual	Estimate	Estimate		
Direct obligations:					
Personnel compensation:					
11.11 Full-time permanent	23	24	25		
11.13 Other than full-time permanent	1	1	1		
11.15 Other personnel compensation	1	1	2		
11.19 Total personnel compensation	25	26	28		
11.21 Civilian personnel benefits	4	4	5		
12.10 Travel and transportation of persons	8	8	9		
12.51 Advisory and Assistance Services	13	13	14		
12.52 Other services	318	318	320		
32.53 Purchases of goods and services					
from government accounts	339	339	341		
12.57 Operation and maintenance of equipment	5	5	5		
12.60 Supplies and materials	3	3	3		
13.10 Equipment	1	1	1		
14.10 Grants, subsidies, and contributions	30,407	39,265	38,588		
19.90 Limitation on general operating expenses (see separate schedule)	2				
19.90 Subtotal, direct obligations	31,125	39,982	39,314		

OBJECT CLASSIFICATION in millions of dollars

in millions of dollars					
Identif	ication code:	2006	2007	2008	
69-808	3-0-7-401	Actual	Estimate	Estimate	
Reimb	ursable obligations:				
	Personnel compensation:				
21.11	Personnel compensation: Full-time permanent	20	20	21	
21.21	Civillian personnel benefits	5	5	5	
22.10	Travel and transportation of persons	3	6	6	
22.33	Communications, utilities, and misc. charges	1	2	2	
12.51	Advisory and Assistance Services	12	23	23	
22.52	Other services	3	6	6	
32.53	Purchases of goods and services				
	from government accounts	10	44	44	
12.57	Operation and maintenance of equipment	1	2	2	
22.60	Supplies and materials	4	8	8	
23.10	Equipment	2	4	3	
29.90	Subtotal, reimbursable obligations	61	120	120	

OBJECT CLASSIFICATION in millions of dollars

	in millions of dollars					
Identif	ication code:	2006	2007	2008		
69-808	3-0-7-401	Actual	Estimate	Estimate		
Alloca	tion accounts - direct:					
	Personnel compensation:					
31.11	Full-time permanent	32	33	34		
21.12		4	4			
31.13	Other than full-time permanent	4	4	4		
11.15	Other personnel compensation	1	1	1		
31.19	Total personnel compensation	37	38	39		
51.19	Total personnel compensation	57	30	39		
31.21	Civilian personnel benefits	9	9	9		
51.21	ervinan personner benefits	,	,	,		
32.10	Travel and transportation of persons	2	2	2		
52.10	raver and damsportation of persons	-	2	2		
32.31	Rental payments to GSA	3	3	3		
02101		C	C	C.		
32.51	Advisory and assistance services	1	1	1		
32.52	Other services	115	114	114		
32.53	Purchases of goods and services					
	from government accounts	4	4	4		
32.55	Research and development contracts	1	1	1		
32.60	Supplies and materials	4	4	4		
33.10	Equipment	4	4	4		
33.20	Land and structures	22	22	22		
34.10	Grants, subsidies, and contributions	662	662	663		
39.90	Subtotal, obligations from allocation accounts	864	864	866		
22.20		001	001	200		

OBJECT CLASSIFICATION in millions of dollars

in millions of dollars					
Identifi	ication code:	2006	2007	2008	
	3-0-7-401	Actual	Estimate	Estimate	
Limitat	tion account - Direct Obligations: ^{1/} Personnel compensation:				
61.11	Full-time permanent	183	189	206	
61.13	Other than full-time permanent	3	3	3	
61.15	Other personnel compensation	3	3	3	
61.19	Total personnel compensation	189	195	212	
61.21	Civilian personnel benefits	53	53	58	
62.10	Travel and transportation of persons	10	10	10	
62.20	Transportation of things	1	1	1	
62.31	Rental payments to GSA	22	26	27	
62.32	Rental payments to others	1	1	1	
62.33	Communications, utilities, and misc. charges	3	3	3	
62.40	Printing and reproduction	1	1	1	
62.51	Advisory and assistance services	18	12	12	
62.52	Other services	19	15	15	
62.53	Purchases of goods and services from government accounts	10	15	17	
62.57	Operation and maintenance of equipment	20	21	20	
62.60	Supplies and materials	2	2	2	
63.10	Equipment	6	6	6	
64.40	Refunds	5			
69.90	Subtotal, obligations from limitation account	360	361	385	
			,		

1/ Data revised from amounts reflected in FY 2008 Budget Appendix.

FEDERAL AID HIGHWAY

EMPLOYMENT SUMMARY

Identif	fication code:	FY 2006	FY 2007	FY 2008
69-808	83-0-7-401	Actual	Estimate	Estimate
	Direct:			
10.01	Civilian full-time equivalent employment	333	333	333
	Reimbursable:			
20.01	Civilian full-time equivalent employment	215	215	215
	Limitation Account - direct:			
60.01	Civilian full-time equivalent employment	2,215	2,215	2,430

FEDERAL HIGHWAY ADMINISTRATION LIMITATION ON ADMINISTRATIVE EXPENSES

Not to exceed \$384,556,000, together with advances and reimbursements received by the Federal Highway Administration, shall be paid in accordance with law from appropriations made available by this Act to the Federal Highway Administration for necessary expenses for administration and operation.

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.

Detailed Justification for Limitation on Administrative Expenses (in thousands of dollars)

Operating Expenses (Ob. Lim.)	FY 2008 Request:	\$384,556
	FY 2007 President's Budget:	\$372,504
	FY 2007 Continuing Resolution:	\$360,992

Overview:

This account provides for the necessary resources to support Limitation on Administrative Expenses activities and maintain the agency's administrative operations. Funding will support activities related to the goals of the President's Management Agenda, implementing the requirements of the SAFETEA-LU authorization, and meeting other Federal mandates.

FY 2007 Base:

The Limitation on Administrative Expenses funds salaries and benefits, travel, rent, communications, utilities, printing, contractual services, supplies and equipment. As shown in Exhibit II-6, the FY 2007 estimate totals \$361.0 million. This level reflects a full year Continuing Resolution (CR) and includes \$248.6 million for the salaries and benefits for 2,215 full time equivalents (FTE), which is below the authorized staffing level. The FY 2007 CR level also includes \$26.4 million for rent, \$15.2 million for the Working Capital Fund, \$9.7 million for travel, and \$61.0 million for other activities critical to maintaining the agency's administrative operations.

For the purpose of this budget presentation, the FY 2007 base reflects the CR level. The CR level is \$11.5 million less than the FY 2007 President's Budget request, which reflects an obligation limitation for LAE of \$372.5 million.

Anticipated FY 2007 Accomplishments:

The FHWA will implement improvements and corrective actions identified in the accountability reviews of the performance management system and the employee recognition system. The Agency will also finalize an accountability review plan for FY 2007 and conduct an accountability review of selected staffing and recruitment programs in the talent area. Further accountability review activity will be coordinated with the DOT Accountability Review Program Plan.

The FHWA will shift to a multidisciplinary workforce, while continuing to assess the needed skill change of employees through workforce planning and closing the gaps in

mission critical occupations in anticipation of the significant number of employees retiring. The Agency expects that the cultural shift to an organization committed to project oversight and effective financial management will be fully operational. The Professional Development Program will be used to hire individuals in critical disciplines, including financial management. Recruitment incentives will be critical to attracting individuals with the needed multidisciplinary skills. The FHWA will implement actions necessary to change the skills mix of the financial management workforce. The Agency's learning and development program will train increasing numbers of employees in project oversight and financial management and incorporate the multidisciplinary files and accountability and at all levels of training. Plans to fund rotational assignments for mid-career hires to ensure that they have the skills needed to perform on the job. Numerous training programs will be offered via videoconferencing and web conferencing. These include Support Staff Training, parts of the New Supervisor Training and the New Employee Orientation. The FHWA will continue to implement the Diversity Action Plan and create an organizational climate that enables a multidisciplinary workforce to achieve the strategic goals of the Agency. Recruitment incentives will be used to attract individuals with diverse skills and backgrounds. The Agency will work to reduce the under-representation of Hispanic employees and individuals with disabilities.

The FHWA plans to ensure that awards are being used to recognize achievements that advance the Agency's goals and objectives. The Agency will carefully monitor that these Agency goals and objectives, as stated in the Agency Performance Plan and the Administrator's Performance Agreement with the Secretary, are cascaded down to Senior Executives' performance objectives and to the performance plans of individual employees, and are used as the basis for recognizing and rewarding employee accomplishments. The Agency will use approximately 1% of the salaries paid in FY 2007 for its employee recognition and awards budget to support this strengthening of the performance culture in the FHWA in FY 2007.

In its role as the "Executive Agent" for the DOT automated staffing unit, FHWA will continue to enhance the automated staffing system and work with the modal administrations within DOT to improve timeliness of selections. In FY 2006, the performance measurement of the 45-Day model for the Department was changed to track the percentage of cases that met the 45 workday goal as opposed to the average number of days. The Executive Agent will work with each mode to promote awareness of the goal and improve timeliness of the actions such that 80 percent of certificates are signed by the Selecting Officials within 45 workdays from the date the announcement closes. The Executive Agent will continue to reduce the average number of days to 7 days or less and to issue 90 percent of certificates within 15 days, with over 80 percent being issued within 7 days.

The FHWA plans continued accomplishments in the IT e-Gov area in FY 2007. The accomplishments include continuing to lead a Departmental e-Government committee to work on crosscutting IT initiatives, completing the consolidation of IT infrastructure in the Field as a matter of best practice and conform the Field infrastructure with IT in

Headquarters, continuing to improve and refine the FHWA enterprise architecture, and continuing to improve and refine management of the FHWA IT portfolio. The FHWA will continue to enhance IT security and support the 24 E-Gov initiatives through contributions and partnering.

In FY 2007, new versions of the Department of Interior's Federal Personnel and Payroll System (FPPS) will be implemented as they become available.

FHWA anticipates implementing the advanced functionality, Individual Development Plan (IDP), within the DOT Electronic Learning Management System (eLMS) in FY 2007.

The Enterprise Human Resource Integration (EHRI) is an e-Gov initiative under the President's Management Agenda, which includes implementation of the Electronic Official Personnel File (e-OPF). In FY 2007, the FHWA will begin to convert paper OPFs to electronic format.

FY 2008 Budget Request:

FHWA requests \$384.6 million for the Limitation on Administrative Expenses (LAE). In addition, SAFETEA-LU authorizes \$3 million for administrative expenses of the Appalachian Regional Commission (ARC) and \$3.5 million for audits conducted by the DOT Office of Inspector General.

The FY 2008 estimate reflects increases to the FY 2007 estimate for cost of living adjustments (COLA), filling mission-critical vacancies, rent costs, and Working Capital Fund costs. The adjusted base totals \$369.3 million, an increase of \$8.3 million above the FY 2007 CR level.

As detailed in Exhibit II-6, the requested increase in FY 2008 is needed to cover the expenses of COLA and of filling 215 mission-critical vacancies, increased rent costs, and increased Working Capital Fund assessments. As a result of hiring up to the authorized FTE level in FY 2008, FHWA estimates additional salaries and benefits costs of \$15.2 million in FY 2008.

LAE funding will also be utilized to support the Department-wide Congestion Initiative. This funding will address the following potential needs:

- Increased staff support and expertise in key emerging program areas such as public private partnerships, congestion pricing, and system operations.
- Travel to congested metropolitan areas to promote key elements of the Congestion Initiative and to evaluate the benefits of major tests or demonstrations.

- Increased technical assistance to State and local partners advancing leadingedge congestion-reducing projects or programs.
- Extensive outreach and communications on the Congestion Initiative, including publication services, exhibits, and websites.

FHWA expects to accomplish the operational activities described below in FY 2008.

By FY 2008, the FHWA will have fully developed and implemented an ongoing multiyear schedule of accountability reviews addressing other specific program areas in accordance with the DOT Accountability Review Program Plan and the FHWA Accountability Review Program. In addition, follow-up assessments will be initiated to measure the effectiveness of program improvements implemented as a result of previous Accountability Reviews.

The FHWA will continue to improve IT e-Gov initiative through e-Government committees, refinement of the FHWA enterprise infrastructure and management of the IT portfolio and enhance IT security.

The FHWA will continue to implement new versions of FPPS as they are offered.

The FHWA will implement new functionalities within eLMS, including competencies and building course curriculum.

The FHWA will continue to improve the automated staffing system and work with DOT Administrators to improve the timeliness of the selection process.

In FY 2007, as part of the Enterprise Human Resource Integration (EHRI) as an e-Government initiative under the President's Management Agenda, the FHWA initiated the conversion of paper Official Personnel Files (OPFs) to electronic Official Personnel File (e-OPF). In FY 2008, the FHWA will convert the remaining paper OPFs to electronic format and will implement full usage of e-OPF.

The FHWA will have fully developed and implemented an ongoing multi-year schedule of accountability reviews addressing the alignment of the organization's performance plan with executive, supervisor and employee performance and their recognition/awards to achieve more a effective pay-for-performance program.

To implement OPM's accountability initiative, FHWA will continue to integrate into our business processes additional components of an accountability system that provides consistent means to monitor and analyze agency performance on all aspects of human capital management policies, programs, and activities, which must themselves support mission accomplishment and be effective, efficient, and in compliance with merit system principles.

The Agency's focus on pay-for-performance will be results-driven, producing a distribution of pay adjustments and awards based on individual contribution, organizational performance, and/or team performance. Follow-up assessments will be

conducted to measure the effectiveness of program improvements implemented as a result of previous Accountability Reviews.

The FHWA is in a transition period and facing the possible retirement of a substantial portion of its workforce over the next 5 years. The Agency will recruit extensively to attract top quality candidates with diverse competencies so FHWA can achieve its mission through a multi-disciplinary workforce. The Succession Plan will be implemented to ensure its workforce has depth in leadership skills to replace retiring employees.

The FHWA learning community will implement a more coordinated, more comprehensive view of employee development. Learning will be part of a career development plan tied to the FHWA strategic and performance goals, competencies and career paths. Together, the FHWA learning organizations will continue to engage in delivering learning activities that affect every segment of the FHWA. The FHWA will persist in transitioning to an organization that:

- Embraces a multidisciplinary workforce of technical specialists and generalists
- Provides technical assistance and high level program oversight
- Develops its leaders through multiple learning opportunities
- Is "nimble to change" according to new program requirements

The FHWA will support the Human Capital Initiative by providing a variety of competitive management and executive training programs geared to the development of our leaders. With many supervisors and managers becoming retirement-eligible, we are developing the next generation of leaders to lead the FHWA into the future. FHWA will also fund rotational assignments and mid-career hires to ensure they have the skills needed to perform their job.

FHWA will support delivery of training and learning activities to improve financial accountability at every level of the organization. Through degree and certificate programs, FHWA will support education and training in the areas of project management, business and financial and engineering management, as well as other areas that enhance the financial performance and abilities of employees.

Explanation of Funding Changes for Limitation on Administrative Expenses (in thousands of dollars)

Overview:

This account provides for the necessary resources to support Limitation on Administrative Expenses (LAE) activities and maintain the agency's administrative infrastructure. Funding will support activities related to the goals of the President's Management Agenda, implementing the requirements of the SAFETEA-LU legislation, and meeting other Federal mandates.

LAE, FY 2007 Continuing Resolution	\$360,992
Adjustments to Base:	
Salaries and Benefits The requested increase is needed for Personnel Compensation and Benefits (PC&B) related annualizations. Assumes 2.2% pay raise and two additional compensable days as compared with FY 2007.	+\$6,301
GSA Rent and Utilities The requested increase for GSA rent is due to inflation.	+\$498
Other Contractual Services The requested increase for the Working Capital Fund is assigned by the Department due to an increase in the services provided.	+\$1,539
Total Adjustments to Base:	\$8,338
Program Changes:	
Salaries and Benefits The requested increase is needed to fill filling 215 mission- critical vacancies. FHWA's staffing level is well below the authorized level of 2,430 FTE due to the reauthorization delays prior to the enactment of SAFETEA-LU and the FY 2007 CR. FHWA is committed to filling these important vacancies in FY 2008.	\$15,226
LAE, FY 2008 President's Budget	\$384,556

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DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION EMERGENCY RELIEF

BACKGROUND

The Emergency Relief program receives \$100 million annually in mandatory funds from the Highway Trust Fund in the Federal-aid highways account. SAFETEA–LU authorized the program to receive additional General Fund discretionary funding as needed. These funds are provided through this account starting in FY 2006. In FY 2006, \$3.5 billion in supplemental appropriations were provided for this program (P.L. 109-148 and 109-234).

BUDGETARY RESOURCES

No new budget authority is requested for FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION EMERGENCY RELIEF

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

In millions of		2007	2000
Identification code:	2006	2007	2008
69-0500-0	Actual	Estimate	Estimate
Obligations by program by activity: 00.01 Emergency relief program 10.00 Total new obligation (object class 41.0)	2,123 2,123	1,329 1,329	
Budgetary resources available for obligation			
21.40 Unobligated balance available, start of year22.00 New budget authority (gross)23.90 Total budgetary resources available for		1,329	
obligations 23.95 Total new obligations		1,329 -1,329	
24.40 Unobligated balance available, end of year	1,329		
New budget authority (gross), Detail: Discreationary: 40.00 Appropriation	3,452		
Change in obligated balances			
 72.40 Obligated balance, start of year	2,123 849	1,274 1,329 -1,438 1,165	1,165 -586 579
Outlays (gross), detail 86.90 Outlays from new discretionary authority 86.93 Outlays from discreationary balances 87.00 Total outlays (gross)		 1,438 1,438	
Net budget authority and outlays:			
89.00 Budget authority 90.00 Outlays			586
95.02 Unpaid obligation, end of year	1,274		

EMERGENCY RELIEF

OBJECT CLASSIFICATION

Identification code:	2006	2007	2008
69-0500-0	Actual	Estimate	Estimate
Direct obligations:			
14.10 Direct obligations:Grants, susbsides, and contributions.	2,123	1,329	

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

BACKGROUND

The Federal Highway Administration received an appropriation of \$19.8 million from the General Fund for the Appalachian Development Highway System in FY 2006. Under the terms of a full-year Continuing Resolution in FY 2007, this program would receive an appropriation of \$82.3 million. Obligations and outlays for the Highway Trust Fund account result from prior year appropriations.

BUDGETARY RESOURCES

No new budget authority is requested for FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identif	fication code:	2006	2007	2008
69-064	40-0-1-401	Actual	Estimate	Estimate
00.01 10.00	Obligations by program by activity: Appalachian Hwy. Dev. Sys. 2005 Total obligations	105 105	216 216	
	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year	196	134	
22.00	New budget authority (gross)	<u>20</u>	<u>82</u>	
23.90	Total budgetary resources available for obligation	239	216	
23.95	New obligations	<u>-105</u>	<u>-216</u>	
24.40	Unobligated balance available, end of year	134		
40.00	New budget authority (gross), detail Discretionary Appropriation	20	82	
	Change in obligated balance			
72.40	Obligated balance, start of year	189	176	25
73.10	New obligations	105	216	
73.20	Total outlays (gross)	-95	-139	-12
73.45	Recoveries of prior year obligations	-23		
74.40	Obligated balance, end of year	176	253	12
	Outlays (gross), detail			
86.90	Outlays from new discretionary authority	- -	22	
86.93	Outlays from discretionary balances	95 05	117	12
87.00	Total outlays (gross)	95	139	12
00.00	Net budget authority and outlays			
89.00	Budget authority	20	82	
90.00	Outlays	95 176	139	12
95.02	Unpaid obligations end of year	176		

APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

OBJECT CLASSIFICATION

Identification code:	2006	2007	2008
69-0640-0-1-401	Actual	Estimate	Estimate
Direct obligations:			
12.52 Other Services	105	216	

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

PROGRAM AND FINANCING SCHEDULE

In millions of	of dollars		
Identification code:	2006	2007	2008
69-8072-0-1-401	Actual	Estimate	Estimate
Obligations by program by activity:			
00.02 Sec. 378 of P.L. 106-346	1	3	
10.00 Total obligations	1	. 3	
Budgetary resources available for obligation			
21.40 Unobligated balance available, start of year22.10 Resources available from recoveries of prior	3	3	
year obligations	1		
23.90 Total budgetary resources available for obligations		3	
23.95 New obligations		-3	
24.40 Unobligated balance available, end of year			
Change in obligated balances			
72.40 Obligated balance, start of year	9	7	6
73.10 New obligations		3	
73.20 Total outlays (gross)	-2	-4	-4
73.45 Recoveries of prior year obligations			
74.40 Obligated balance, end of year	7	6	2
Outlays (gross), detail			
86.93 Outlays from discretionary balances	2	4	4
Net Budget authority and outlays:			
89.00 Budget authority			
90.00 Outlays		4	4
95.02 Unpaid obligations, end of year	9		

In millions of dollars

APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

OBJECT CLASSIFICATION

Identification code:	2006	2007	2008
69-8072-0-1-401	Actual	Estimate	Estimate
Direct obligations:			
12.52 Other Services	1	3	

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MISCELLANEOUS APPROPRIATIONS

(CANCELLATION)

Any unobligated balances under this heading are cancelled.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MISCELLANEOUS APPROPRIATIONS

BACKGROUND

This account contains miscellaneous appropriations from the General Fund. Obligations and outlays result from prior year appropriations.

BUDGETARY RESOURCES

No new budget authority is requested for FY 2008. The budget proposes the cancellation of \$149 million of the remaining unobligated balances in FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MISCELLANEOUS APPROPRIATIONS

PROGRAM AND FINANCING SCHEDULE

In	millions	s of dol	lars	

ion code: 11-401	2006 Actual	2007 Estimate	2008 Estimate
	Actual	Estimate	Estimate
			Estimate
ligations by program by activity:			
aterest on TIFIA Upward Reestimate		1	
terstate transfer grants	1		
ighway demonstration projects	3		
ighway demonstration			
	-		
0 01 0	-	-	
otal new obligation (object class 41.0)	25	2	
dgetary resources available for obligation			
nobligated balance available, start of year	138	150	149
		150	-14
		1	-14
	37		
	57		
5	175	151	
6			
-			
noongated balance available, end of year	150	177	
ew budget authority (gross), Detail:			
Discreationary:			
nobligated balance permanetly reduced			-14
ew budget authority (gross). Detail			
		1	
otal new budget authority (gross)		1	-14
ange in obligated balances			
bligated balance, start of year	511	312	19
	25	2	
-	-187	-117	-4
	-37		
bligated balance, end of year	312	197	15
tlays (gross), detail			
			-4
	187		8
	•••••	1	
otal outlays (gross)	187	117	4
et budget authority and outlays:			
udget authority		1	-14
utlays	187	117	-14
npaid obligation, end of year	310	117	4
	ojects-preliminary engineering urface transportation projects	ojects-preliminary engineering	opects-preliminary engineering

MISCELLANEOUS APPROPRIATIONS

OBJECT CLASSIFICATION

Identification code:	2006	2007	2008
69-9911-01-401	Actual	Estimate	Estimate
Direct obligations:			
14.10 Direct obligations:Grants, subsidies, and contributions	25	2	

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MISCELLANEOUS HIGHWAY TRUST FUNDS

(CANCELLATION)

Any unobligated balances under this heading are cancelled.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MISCELLANEOUS HIGHWAY TRUST FUNDS

BACKGROUND

This account contains miscellaneous appropriations from the Highway Trust Fund. Obligations and outlays result from prior year appropriations.

BUDGETARY RESOURCES

No new budget authority is requested for FY 2008. The budget proposes the cancellation of \$260.5 million of the remaining unobligated balances in FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MISCELLANEOUS HIGHWAY TRUST FUNDS

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identifi	cation code:	2006	2007	2008
69-997	2-0-7-401	Actual	Estimate	Estimate
	Obligations by program by activity:			
00.27	Miscellaneous highway projects	124		
10.00	Total new obligation (object class 41.0)	124		
10.00	Total new obligation (object class 41.0)	124		
]	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year	356	260	260
22.00	New budget authority (gross)			
22.10	Resources available from recoveries of			
	prior year obligations	28		
23.90	Total budgetary resources available for			
	obligations	384	260	
23.95	Total new obligations	-124		
24.40	Unobligated balance available, end of year	260	260	
40.36	New budget authority (gross), Detail: Discreationary: Unobligated balance permanetly reduced			-260
(Change in obligated balances			
72.40	Obligated balance, start of year	387	338	198
73.10	New obligations	124		
73.20	Total outlays (gross)	-145	-140	-11
73.45	Recoveries of prior year obligations	-28	140	11
74.40	Obligated balance, end of year	338	198	187
74.40	Obligated balance, end of year	558	198	107
(Outlays (gross), detail			
86.90	Outlays from new discretionary authority			-70
86.93	Outlays from discreationary balances	145	140	81
87.00	Total outlays (gross)	145	140	11
07.00	Total outlays (gross)	115	110	
	Net budget authority and outlays:			
89.00	Budget authority			-260
90.00	Outlays	145	140	11
95.02	Unpaid obligation, end of year	338	110	11
/5.02	Chpure conguton, one or your	550		

MISCELLANEOUS HIGHWAY TRUST FUNDS

OBJECT CLASSIFICATION

Identification code:	2006	2007	2008
69-9972-0-7-401	Actual	Estimate	Estimate
Direct obligations:			
14.10 Direct obligations:Grants, susbsides, and contributions.	124		

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DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MISCELLANEOUS TRUST FUNDS

BACKGROUND

Funds received by this account come completely from non-Federal sources. FHWA holds these funds in trust until they outlay. The following programs are included in this fund:

- 1. Cooperative work, forest highway (Proprietary Receipts) Contributions are received from States and countries in connection with cooperative engineering, survey, maintenance, and construction projects for forest highways.
- 2. Technical assistance, U.S. dollars advance from foreign governments (Proprietary Receipts) – The Federal Highway Administration renders technical assistance and acts as agent for the purchase of equipment and materials for carrying out highway programs in foreign countries.
- 3. Contributions for highway research programs (Governmental Receipts) Contributions are received from various sources in support of the FHWA Research, Development, and Technology Program. The funds are used primarily in support of pooled-funds projects.
- 4. Advances from State cooperating agencies (Proprietary Receipts) Funds are contributed by the State highway departments or local subdivisions for construction and/or maintenance of roads and bridges. The work is performed under the supervision of the Federal Highway Administration.
- 5. International highway transportation outreach (Proprietary Receipts) Funds collected to inform the domestic highway community of technological innovations, promote highway transportation expertise internationally, and increase transfers of transportation technology to foreign countries.

BUDGETARY RESOURCES

The budget estimates that \$300 million will be available from non-Federal sources in FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MISCELLANEOUS TRUST FUNDS

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

T.J	cation code:	2006	2007	2008
				2008
69-997	1-0-7-999	Actual	Estimate	Estimate
	Obligations by program by activity:			
00.01	Cooperative work, forest highways	3	51	51
00.03	Contributions for highway research	6	16	16
00.03	Advances from State cooperating Agencies	45	41	41
00.05	Advances from other Federal Agencies	27	238	192
10.00	Total obligations	81	346	300
10.00		01	510	500
1	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year	78	47	1
22.00	New budget authority (gross)	50	300	300
23.90	Total budgetary resources available for			
	obligations	128	347	301
23.95	Total new obligations	-81	-346	-300
24.40	Unobligated balance available, end of year	47	1	1
	New budget authority (gross), Detail:			
	Mandatory:			
60.26	Appropriations (trust fund)			
	[69-9971-0-999-N-0500-01]	50	300	300
(Change in obligated balances			
72.40	Obligated balance, start of year	155	164	201
73.10	New obligations	81	346	300
73.20	Total outlays (gross)	-72	-309	-364
74.40	Obligated balance, end of year	164	201	137
(Outlays (gross), detail			
86.97	Outlays from new mandatory authority		243	243
86.98	Outlays from mandatory balances	72	66	121
87.00	Total outlays (gross)	72	309	364
	Net budget authority and outlays:			
89.00	Budget authority	50	300	300
90.00	Outlays	72	309	364
95.02	Unpaid obligation, end of year	165	507	504
/0.02	enpute congution, end of your third the	105		

MISCELLANEOUS TRUST FUNDS

OBJECT CLASSIFICATION

In millions of dollars						
Identification code: 2006 2007 2008						
69-9971-0-7-999	Actual	Estimate	Estimate			
Direct obligations: Personnel compensation:						
11.11 Personnel Compensation: Full-time permanent	4	4	4			
12.52 Other Services	77	342	296			
99.99 Total new obligations	81	346	300			

MISCELLANEOUS TRUST FUNDS

EMPLOYMENT SUMMARY

Identification code:	2006	2007	2008
69-9971-0-7-999	Actual	Estimate	Estimate
Direct:			
10.01 Civilian full-time equivalent employment	39	39	39

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION ACT FINANCING ACCOUNTS

BACKGROUND

As required by the Federal Credit Reform Act of 1990, these non-budgetary accounts record all cash flow to and from the Government resulting from credit assistance obligated in 1992 and later years (including modifications of credit assistance resulting from obligations in any year). The amounts in these accounts are a means of financing and are not included in the budget totals. The TIFIA credit program utilizes three separate financing accounts, one for each credit instrument offered by the program: direct loan, loan guarantee, and contingent line of credit.

SAFETEA-LU provides contract authority for the TIFIA program to assist in the funding of nationally or regionally significant transportation projects. The subsidy costs and administrative expenses associated with this program are included in the Federal-aid Highway schedules.

In FY 2006, USDOT received three toll road project applications seeking a total of \$1.2 billion in TIFIA credit assistance. Two of these applications represent publicprivate partnerships (P3s) with State DOTs that would replicate development models common in Europe, Australia and South America. Three additional projects indicated, via letters of interest, their intent to seek TIFIA assistance in the near future.

The interest among many States and other government transportation providers in utilizing P3s to privatize existing facilities and to develop new facilities creates many new opportunities to utilize TIFIA to assist infrastructure investment. The DOT interacts with all sectors of this growing industry via participation in conferences, ongoing production of an innovative finance newsletter and a user-friendly website, and frequent meetings with rating agencies, banks, equity investors, developers and operators. The DOT expects the use of TIFIA to increase significantly as a result of this trend.

A 2006 Program Assessment Rating Tool (PART) review of the TIFIA program found that TIFIA's guidelines do not necessarily ensure that the type of credit assistance provided is the most cost effective for the Government, and that TIFIA's design does not ensure promotion of private investment. In response DOT is developing loan approval criteria for applicants to take full advantage of private-sector financing opportunities and to better target TIFIA assistance.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION FINANCING ACCOUNT - DIRECT LOAN

PROGRAM AND FINANCING SCHEDULE

In millions of dollars	2006	2007	2008
69-4123-0-3-401	Actual	Estimate	Estimate
	/ icitual	Lotinute	Lotinute
Program by Activities:			
00.01 Loan obligations	42	2,200	1,381
00.02 Interest paid to Treasury	17	21	66
00.91 Direct Program by Activities	59	2,221	1,447
08.02 Downward Reestimate	14		
10.00 Total new obligations	73	2,221	1,447
Budgetary resources available for obligation:	20	22	
21.40 Unobligated balance brought forward	39 64	32	1.512
22.00 New financing authority (gross)22.10 Resources available from recoveries of prior year Obligations	04 704	2,349 163	1,512 0
22.60 Portion applied to repay debt	0	(35)	(65
22.70 Balance of authority to be withdrawn	(702)	(288)	(05
23.90 Total budgetary resources available for obligation	105	2,221	1,447
23.95 Total new obligations	(73)	(2,221)	(1,447
24.40 Unobligated balance carried forward, end of year	32		
New financing authority (gross), detail:			
Appropriations			
Mandatory:			
67.10 Authority to borrow (indefinite)	55	2,184	1,439
Mandatory		2 104	1.420
67.90 Authority to borrow (total mandatory)	55	2,184	1,439
69.00 Offsetting collections (cash)	249	118	121
69.10 Change in uncollected customer		17	(40
payments from Federal Sources (unexpired) 69.47 Portion applied to repay debt	2 (242)	47	(48
69.90 Spending authority from offsetting collections	(242)	165	73
70.00 Total new financing authority (gross)	64	2,349	1,512
		,	y-
Change in obligated balances			
72.40 Obligated balance, start of year	2,008	1,298	1,976
73.10 Total new obligations	73	2,221	1,447
73.20 Total financing disbursements (gross)	(77)	(1,333)	(1,417
73.45 Recoveries of prior year obligations	(704)	(163)	
74.00 Change in uncollected customer payments from Federal		(17)	40
sources, (unexpired)	(2)	(47)	48
Unpaid obligations, end of year: 74.40 Obligated balance, end of year	1,298	1,976	2,054
74.40 Obligated balance, end of year	1,270	1,570	2,034
Outlays (gross) detail:			
87.00 Total financing disbursements (gross)	77	1,333	1,417
Offsets against gross financing authority and Financing disbursements:			
Offsetting collections (cash) from:			
88.00.01 Federal sources: Subsidy from program account	3	110	121
88.00.02 Federal sources: Payment from program account upward restimate	2	8	
88.25 01 Interest on uninvested funds	8		
88.40 01 Interest payments from borrowers88.40 02 Repayment of Principal, net	11		
88.90 Total offsetting collections (cash)	225		121
	249	110	121
Against gross financing authority only 88.95 Change in receivables from program account	2	47	(48
		.,	(10
Net financing authority and financing disbursements: 89.00 Financing authority	(187)	2,184	1,439
90.00 Financing disbursements	(187)	1,215	1,296
	(1.2)	1,210	1,270

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION FINANCING ACCOUNT - DIRECT LOAN

STATUS OF DIRECT LOAN

Identification code:	2006	2007	2008
69-4123-0-3-401	Actual	Estimate	Estimate
Portions with respect to appropriations act			
limitation on obligations:			
11.31 Direct loan obligations exempt from limitation	42	2,200	1,381
11.42 Unobligated direct loan limitation			
11.50 Total direct loan obligations	42	2,200	1,381
Cumulative balance of direct loans outstanding:			
12.10 Outstanding, start of year	290	119	407
12.31 Disbursement: Direct loan disbursements	54	288	1,351
12.51 Repayments: Repayments and Prepayments	(225))	
12.90 Outstanding, end of year	119	407	1,758
62.00 Net financing disbursements	(172)	1,215	1,296

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION FINANCING ACCOUNT - LOAN GUARANTEE

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code:	2006	2007	2008
69-4145-0-3-401	Actual	Estimate	Estimate
Program by Activities:			
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year			9
22.00 New financing authority (gross)		9	8
23.90 Total budgetary resources available for obligation		9	17
24.40 Unobligated balance carried forward, end of year:		9	17
New financing authority (gross), detail:			
Mandatory			
69.00 Offsetting collections (cash)		9	8
Offsets			
Against gross financing authority and financing disbursements:			
88.00 Offseting collections (cash) from:			
Federal sources: loan guarantee subsidy		8	7
88.25.01 Interest on uninvested funds		1	1
88.90 Total, offsetting collections (cash)		9	8
Net financing authority and financing disbursements			
89.00 Financing Authority			
90.00 Financing disbursements		(9)	(8)

STATUS OF GUARNTEED LOANS

Identification code:	2006	2007	2008
69-4145-0-3-401	Actual	Estimate	Estimate
Position with respect to appropriations act			
limitation on commitments:			
21.31 Guarnteed loan commitments exempt from limitation	200	200	200
21.42 Uncommitted loan guarantee limitation	(200)		
21.50 Total guaranteed loan commitments		200	200
21.99 Guaranteed amount of guaranteed loan commitments		200	200
Cummulative balance of guarantee loans outstanding			
22.10 Outstanding, start of year			200
22.31 Disbursements of new guaranteed loans		200	200
22.51 Repayments and Prepayments			
22.90 Outstanding, end of year		200	400
Management			
Memorandum			
22.99 Guaranteed amount of guaranteed loans outstanding,			
end of year		200	400
62.00 Net financing disbursements		(9)	(8)

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION FINANCING ACCOUNT - LINE-OF-CREDIT

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code:	2006	2007	2008
69-4173-0-3-401	Actual	Estimate	Estimate
Program by Activities:			
Obligations by program activity			
00.01 Llines of credit		200	200
00.02 Interest Paid to Treasury		200	200
10.00 Total new obligations		202	202
10.00 Total new obligations		202	202
Budgetary resources available for obligation:			
22.00 New financing authority (gross)		202	202
22.10 Resources available from recoveries of prior year obligations		20	
22.70 Balance of authority to borrow withdrawn		(18)	
23.90 Total budgetary resouces available for obligation		204	202
23.95 Total new obligations		(202)	(202)
New financing authority (gross), detail:			
Mandatory:			
67.10 Authority to borrow		191	191
of the Automy to bollow		191	1)1
Mandatory:			
69.00 Offsetting collections (cash)		3	3
69.10 Change in uncollected customer payments from Federal sources (unexpired)		8	8
69.90 Spending authority from offsetting collections (total mandatory)	0	11	11
70.00 Total new financing authority (gross)	0	202	202
Change in obligated balances			
72.40 Obligated balance, start of year	18	18	150
73.10 Total new obligations		202	202
73.20 Total financing disbursements (gross)		(42)	(42)
73.45 Recoveries of prior year obligations		(42)	. ,
74.00 Change in uncollected customer payments from Federal sources (unexpired)		(20)	
74.40 Obligated balance, end of year	18	150	302
74.40 Obligated balance, end of year	18	150	502
87.00 Total financing disbursements (gross)		42	42
Offsets			
Against gross financing authority and financing disbursements:		3	2
88.00 Offsetting collections (cash) from Federal sources		5	3
Against gross financing authority only			
88.95 Change in receivables from program account		8	8
Nat financing outpority and financing disk			
Net financing authority and financing disbursements:		101	101
89.00 Financing authority		191	191
90.00 Financing disbursements		39	39

STATUS OF LINE-OF-CREDIT

Identification code:	2006	2007	2008
69-4173-0-3-401	Actual	Estimate	Estimate
Portions with respect to appropriations act			
limitation on obligations			
11.31 Limitation on direct loans	200	200	200
11.42 Unobligated direct loan limitation	(200)		
11.50 Total direct loan obligations		200	200
Cumulative balance of direct loans outstanding:			
12.10 Outstanding, start of year			42
12.31 Disbursements: Direct loan disbursements		42	42
12.90 Outstanding, end of year		42	84
62.00 Net financing disbursements		39	39

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DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION ORANGE COUNTY (CA) TOLL ROAD DEMONSTRATION PROJECT

BACKGROUND

San Joaquin Hills Project

The Congress appropriated \$9.6 million in FY 1993 to extend a \$120 million line-ofcredit to the Transportation Corridor Agency's (TCA) San Joaquin Hills public toll road. The loan agreement stipulates that no more than \$12 million may be disbursed in any year of operation and draws may be taken only through December 31, 2007. Because of the time and amount limitations on draws, \$12 million of the line-of-credit expires each year if not drawn.

As required by the Federal Credit Reform Act of 1990, program and financing accounts have been established to record activity related to direct loan obligations for the Orange County toll roads. The original subsidy obligation of \$9.6 million in the program account and the loan obligation of \$120 million in the financing account for the San Joaquin Hills Project were recorded when the loan agreement was executed. As loan amounts expire, they are de-obligated in both the program and financing accounts. To date, the San Joaquin Hills Project has not drawn down its line-of-credit.

Foothills/Eastern Transportation Corridor

The Congress appropriated \$8 million in FY 1995 to extend a \$120 million line-of-credit to the Transportation Corridor Agency's (TCA) Foothills-Eastern Transportation Corridor public toll road. The loan agreement stipulates that no more than \$12 million may be disbursed in any year of operation and draws may be taken only through December 31, 2009. Because of the time and amount limitation on draws, \$12 million of the line-of-credit expires each year if not drawn.

As required by the Federal Credit Reform Act of 1990, program and financing accounts have been established to record activity related to direct loan obligations for the Orange County to roads. The original subsidy obligation of \$8 million in the program account and the loan obligation of \$120 million in the financing account for the Foothills/Eastern Transportation Corridor were recorded when the loan agreement was executed. As loan amounts expire, they are de-obligated in both the program and financing accounts. To date, the Foothills/Eastern Transportation Corridor has not drawn down on its line-of-credit.

BUDGETARY RESOURCES

No new appropriations are requested for FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION ORANGE COUNTY (CA) TOLL ROAD DEMONSTRATION PROJECT DIRECT LOAN PROGRAM ACCOUNT

PROGRAM AND FINANCING SCHEDULE

In millions of do.				
Identification code:	2006	2007	2008	
69-0543-0-1-401	Actual	Estimate	Estimate	
Change in unpaid obligations				
72.40 Unpaid Obligations, start of year	5	5	3	
73.45 Uncollected customer payments from prg. acct.	0	-2		
74.40 Unpaid Obligations, end of year	5	3	3	
89.00 Financing authority				
90.00 Financing disbursements				

In millions of dollars

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION ORANGE COUNTY (CA) TOLL ROAD DEMONSTRATION PROJECT DIRECT LOAN FINANCING ACCOUNT

	In millions of dollar	s		
Identif	ication code:	2006	2007	2008
69-426	64-0-3-401	Actual Estimate		Estimate
	Budgetary resources available for obligation			
22.00	New financing authority (gross)	0	0	
22.10	Resources available from recoveries of			
	prior year obligations	24	24	
22.70	Balance of authority to borrow withdrawn	-24	-24	
23.90	Total budgetary resources available for obligations			
69.10	Change in uncollected customer payments from			
	Federal sources (unexpired)			
66.90	Spending authority from offsetting collections			
Chang	e in obligated balance			
-	Obligated Balance, start of year	91	67	43
73.45	Recoveries of prior year obligations	-24	-24	
74.00	Change in uncollected customer payments from Federal			
	sources (unexpired)	0	0	
74.40	Obligated balance, end of year	67	43	43
	Against gross financing authority only			
88.95	Change in recievables from program accounts			
89.00	Financing authority			
89.00 90.00				
90.00	Financing disbursements			

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DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION RIGHT-OF-WAY REVOLVING FUND

BACKGROUND

The Federal-Aid Highway Act of 1968 authorized the establishment of a Right-of Way fund. This fund is used to make cash advances to States for the purchase of right-of-way parcels in advance of highway construction to reduce the impact of land price inflation on construction costs.

This program was terminated by TEA-21 but will continue to be shown for reporting purposes, while loan balances remain outstanding. The purchase of right-of-way is an eligible expense of the Federal-aid program and therefore a separate program is unnecessary. Funds shall remain available to the State for use on the projects for which the funds were advanced for a period of 20 years from the date on which the funds were advanced. The cumulative balance of loans outstanding at the end of FY 2006 was \$67 million. No further obligations are estimated in FY 2007 or 2008.

Section 1915 of SAFETEA-LU (P.L.109-059) authorized loan forgiveness on California project Q-DPM-0013 (001) in the amount of \$11 million. The California loan forgiveness was executed in FY 2006 and is reflected in the associated Right-of-Way program, financing and liquidating accounts. Repayments are returned to the Highway Trust Fund.

BUDGETARY RESOURCES

No new budgetary resources are requested in FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION RIGHT-OF-WAY (ROW) REVOLVING FUND PROGRAM ACCOUNT - DIRECT LOAN

2006	2007	2008
Actual	Estimate	Estimate
11		
11		
(11)		
0	0	0
11		
11		
(11)		
0	0	0
11	0	0
11		
11		
	Actual 11 11 11 (11) 0 11 11 11 11 11 11	Actual Estimate 11 11 11 0 0 11 11 11 11 11 11 11 11 0 0 11 11 11 11 11 11

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION RIGHT-OF-WAY (ROW) REVOLVING FUND FINANCING ACCOUNT - DIRECT LOAN

Identification code:	2006	2007	2008
69-4270-0-3-401	Actual	Estimate	Estimate
Obligations by program activity:			
00.03 Loan subsidy payment for forgiven liquidating account loan	11		
Budgetary resources available for obligation:			
22.00 New financing authority (gross)	11		
23.95 Total new obligations	(11)		
New financing authority (gross), detail:			
Mandatory:			
69.00 Offsetting collections (cash)	11		
59.00 Offsetung concetions (cash)	11		
Change inobligaed balances:			
73.10 Total new obligations	11		
73.20 Total financing disbursements (gross)	(11)		
Offsets			
Against gross financing authority and financing disbursements:			
88.00 Offseting collections (cash) from:			
Federal sources: ROW program account	11		
1 C			
89.00 Financing Authority			
90.00 Financing disbursements			

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION RIGHT-OF-WAY (ROW) REVOLVING FUND LIQUIDATING ACCOUNT - DIRECT LOAN

In millions of dollars	2006	2007	2008
69-8402-0-8-401	Actual	Estimate	Estimate
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year	12	15	
22.00 New financing authority (gross)	12		
22.10 Resources available from recoveries of prior year obligations	2		
22.40 Portion returned to trust fund from liquidating account	(11)	(15)	
23.90 Total budgetary resouces available for obligation	15		
24.40 Unobligated balance carried forward, end of year	15		
New Budget Authority (gross), detail			
Mandatory:			
69.00 Offsetting collections (cash)	12		
Change in obligated balances			
72.40 Obligated balance, start of year	10	6	6
73.20 Total financing disbursements (gross)	(2)		
73.45 Recoveries of prior year obligations	(2)		
74.40 Obligated balance, end of year	6	6	6
87.00 Total financing disbursements (gross)	2		
Offsets			
Against gross financing authority and financing disbursements:			
88.00 Offsetting collections (cash) from Federal sources	12		
Net financing authority and financing disbursements:			
89.00 Financing authority			
90.00 Financing disbursements	(10)		
Cumulative balance of direct loans outstanding:			
12.10 Outstanding, start of year	78	67	67
12.51 Repayments: Repayments and prepayments		07	07
12.64 Write-offs for default: Loan forgiveness (P.L. 109-59)	(11)		
12.90 Outstanding, end of year	67	67	67

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION STATE INFRASTRUCTURE BANKS

BACKGROUND

In FY 1997, FHWA received an appropriation of \$150 million from the General Fund for the State Infrastructure Banks (SIBs) program. This schedule shows the obligation and outlay of that funding. In FY 1999 and 2002, \$6.5 million and \$5.75 million of the funds provided for the SIBs program were rescinded, respectively.

SIBs have provided critical funds for more than 351 projects. States have entered into agreements with a dollar value of over \$4.5 billion as of September 30, 2003. All of the funds have been provided to the States to capitalize the infrastructure banks. Because the funding was provided for grants, not loans, FHWA will not receive reimbursements of amounts expended for the SIBs program.

BUDGETARY RESOURCES

No new budgetary resources are requested in FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION STATE INFRASTRUCTURE BANKS DIRECT LOAN FINANCING ACCOUNT

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identif	ication code:	2006	2007	2008
69-054	9-0-1-401	Actual	Estimate	Estimate
Change	e in obligated balance			
72.40	Obligated Balance, start of year	4	3	2
73.20	Total Outlays (gross)	-1	-1	-1
74.40	Obligated balance, end of year	3	2	1
	Outlays (gross), detail:			
86.93	Outlays from discretionary balances	1	1	1
89.00	Financing authority			
90.00	Financing disbursements	1	1	1

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION HIGHWAY RELATED SAFETY GRANTS

BACKGROUND

In FY 1997, this account was transferred from the Federal Highway Administration to the National Highway Traffic Safety Administration. Obligations and outlays reflected in this account are from previous to FY 1997 appropriations.

BUDGETARY RECOURCES

No new budgetary resources are requested in FY 2008.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION HIGHWAY RELATED SAFETY GRANTS

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identif	ication code:	2006	2007	2008	
69-801	9-0-1-401	Actual	Estimate Estimate		
72.40 74.40	Change in obligated balances: Obligated balance, start of year Obligated balance, end of year	1	1	1	
89.00 90.00	Budget authority Outlays				
95.02	Unpaid obligations, end of year	1			

ADMINISTRATIVE PROVISIONS—FEDERAL HIGHWAY ADMINISTRATION

SEC. 110. Notwithstanding 31 U.S.C. 3302, funds received by the Bureau of Transportation Statistics from the sale of data products, for necessary expenses incurred pursuant to 49 U.S.C. 111, may be credited to the Federal-aid highways account for the purpose of reimbursing the Bureau for such expenses: Provided, That such funds shall be subject to the obligation limitation for Federal-aid highways and highway safety construction.

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.

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PERFORMANCE OVERVIEW

Annual Performance Results and Targets

The Federal Highway Administration (FHWA) integrates performance results into its budget requests to demonstrate alignment with the Department of Transportation (DOT) Strategic Plan. The FHWA tracks the following DOT level performance measures to demonstrate program results:

Strategic Objective: Safety

Fatalities per 100 million vehicle miles traveled. *Shared measure with NHTSA.	2002	2003	2004	2005	2006	2007	2008
Target	1.40	1.40	1.38	1.38	1.38	1.38	1.37
Actual	1.51	1.48	1.44 (r)	1.45 *	1.44 #		

(r) Revised; * Preliminary Estimate; # Projection

Passenger vehicle occupant highway fatalities per 100 million VMT. Shared measure with NHTSA.	2003	2004	2005	2006	2007	2008
Target	N/A	N/A	N/A	1.12	1.10	1.06
Actual	1.21	1.17	1.14			

(r) Revised; * Preliminary Estimate; # Projection

Non-occupant highway fatalities per 100 million VMT. Shared measure with NHTSA.	2003	2004	2005	2006	2007	2008
Target	N/A	N/A	N/A	0.16	0.15	0.19
Actual	0.19	0.19	0.20			

Motorcycle rider highway fatalities per 100 million VMT. Shared measure with NHTSA.	2005	2006	2007	2008
Target	N/A	0.75	0.76	0.76
Actual	0.75			

(r) Revised; * Preliminary Estimate; # Projection

Large truck and bus fatalities per 100 million VMT. Shared measure with FMCSA.	2005	2006	2007	2008
Target	N/A	0.179	0.175	0.171
Actual	0.184			

Strategic Objective: Reduced Congestion

Percent of total annual urban-area travel time occurring in congested conditions	2002	2003	2004	2005	2006	2007	2008
Target	30.9	31.6	32.3	33.0	33.7	32.5	32.3
Actual	30.7 (r)	31.0 (r)	31.6(r)	31.8 #	32.6 #		

(r) Revised; * Preliminary Estimate; # Projection

Percent of U.S. population with access to 511 travel telephone service.	2002	2003	2004	2005	2006	2007	2008
Target	N/A	30	35	40	50	65	75
Actual	14	17	25	28	35		

(r) Revised; * Preliminary Estimate; # Projection

Percent of travel on the National Highway System (NHS) meeting pavement performance standards for good ride.	2002	2003	2004	2005	2006	2007	2008
Target	N/A	N/A	N/A	53.0	54.0	55.5	57.0
Actual	49.3 (r)	50.0 (r)	52.0 (r)	51.8	54.2		

Strategic Objective: Global Connectivity

Number of freight corridors with an annual decrease in the average buffer index rating.	2006	2007	2008
Target	5	25	25
Actual	3		

Strategic Objective: Environmental Stewardship

Number of exemplary ecosystem initiatives.	2002	2003	2004	2005	2006	2007	2008
Target	N/A	8	10	17	24	50	55
Actual	5	8	15	23	43		

(r) Revised; * Preliminary Estimate; # Projection

12-month moving average number of areas in transportation conformity lapse.	2002	2003	2004	2005	2006	2007	2008
Target	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Actual	6.0	6.0	6.3 (r)	5.8(r)	1.3		

(r) Revised; * Preliminary Estimate; # Projection

Median time in months required for all Federal-aid Highway projects to have a completed Environmental Impact Statement (EIS). – Supplemental to DOT-wide Measure.	2002	2003	2004	2005	2006	2007	2008
Target	N/A	51	48	45	40	36	36
Actual	80	68	54	56 (r)	57		

Median time in months required for all Federal-aid Highway projects to have a completed Environmental Assessment (EA). Supplemental to DOT-wide Measure.	2002	2003	2004	2005	2006	2007	2008
Target	N/A	17	16	15	14	12	12
Actual	N/A	26	25	25 (r)	43		

Strategic Objective: Organizational Excellence

Percent of major Federally funded transportation infrastructure projects with less than 2% annual growth in the project completion milestone as reported in the finance plan. Shared measure with FTA. Actual results do not reflect results for FTA projects.	2002	2003	2004	2005	2006	2007	2008
Target	N/A	N/A	N/A	N/A	N/A	N/A	90
Actual	N/A	N/A	50	83	86		

(r) Revised; * Preliminary Estimate; # Projection

Percent of finance plan cost estimates for major Federally funded transportation infrastructure projects with less than 2% annual growth Shared measure with FTA. Actual results do not reflect results for FTA projects.	2002	2003	2004	2005	2006	2007	2008
Target	N/A	N/A	N/A	N/A	N/A	N/A	90
Actual	N/A	N/A	75	83	86		

(r) Revised; * Preliminary Estimate; # Projection

Detailed performance budget information can be found in Section 4 of the budget submission.

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Program Assessment Rating Tool (PART) Assessment

PART was developed by the Office of Management and Budget to provide a standardized way to assess the effectiveness of the Federal Government's portfolio of programs. The structured framework of PART provides a means through which programs can assess their activities differently than through traditional reviews. The following Federal Highway Administration programs have been assessed via the PART:

<u>Program</u> Federal Aid Highway Program	<u>PART Cycle</u> FY 2004 FY 2005	OMB Assessed Score 82 70
Federal Lands Highway Program	FY 2005	82
Research and Development	FY 2006	83
Emergency Relief	FY 2007	70
TIFIA (Credit Programs)	FY 2008	69

<u>Federal Aid Highway Program Analysis</u>: While the score of 82 and 70 indicate the program is 'moderately effective' OMB's review identified several areas where improvements could be made to the administration of the Federal-aid Highway program.

OMB Recommendation #1: Propose budget and legislative changes to this program through the reauthorization of surface transportation legislation in 2004 that will allow FHWA to more effectively and efficiently meet its performance goals.

Action Taken: Requirements for an oversight program to monitor the effective and efficient use of funds was inserted into Section 1904 of SAFETEA-LU. This program is currently under development. Completion Date: 06/03/04.

Action Taken: Using some of the provisions from the SAFETEA-LU legislation and in conjunction with the Financial Integrity Review and Evaluation (FIRE) procedures, FHWA is developing a more comprehensive review of how the State DOTS use their Federal aid funds. A specific improvement plan is under development and will be available by January 2007. **Completed**

OMB Recommendation #2: Prepare a plan for improving program and project oversight of States.

Action Taken: The FHWA has implemented a draft plan, which should be final by December 2006, for improving the oversight of major projects. "Interim Major Project Guidance" sets forth specific direction on how FHWA will conduct major project oversight and stewardship activities, cost estimating guidance, finance plan guidance, project management plan guidance, cost estimating training, project management training, project management certification program and a lessons learned program. **Completed**.

OMB Recommendation #3: Direct more resources to comprehensive evaluation activities; particularly at the State project level.

Actions Taken: Twenty centrally controlled FTE have been dedicated to project oversight manager positions in the Division Offices. Personnel are assigned to one or more major projects and are responsible for ensuring compliance with the Interim Major Project Guidance concerning the preparation of Financial Plans, Project Management Plans, and the independent validation of project cost estimates for major projects. **Completion Date**: 09/01/05.

OMB Recommendation #4: Devise efficiency measures to show that program delivery is cost-effective.

Actions Taken: FHWA has made using efficiency measures of its programs a standard management practice. The cost and schedule of major projects are tracked semi-annually. **Completion Date**: 02/02/04.

Federal Lands Highway Program Analysis: The OMB PART assessment of the Federal Lands Highway Program is also a 'moderately effective' program. The one area where OMB made improvement recommendations was in external program reviews. This led to the following recommendation.

OMB Recommendation #1: Schedule comprehensive evaluations of program effectiveness.

Action Taken: FLH/NPS Team was established to develop guidance to facilitate the implementation of the MOA concerning the delivery of a larger Park Roads and Parkway Program. The Team identified eleven issues that are critical to the delivery of the program. Several groups are currently working on many of these issues and it has been proposed that additional teams be established to address the remaining issues. The ultimate goal is to develop a comprehensive delivery plan and performance measures.

Next Milestone: Develop comprehensive evaluation plan based on the commitments made by FHWA in the MOA that implements the President's National Park Service Initiative. **Completed**: July 2005. Recommendations from plan continuously being implemented.

OMB Recommendation #2: Developing revised performance measures in coordination with the National Park Service and implementing a program delivery plan that more clearly links activities with goals and performance.

Action Taken: FLH Developing revised performance measures in coordination with the National Park Service and implementing a program delivery plan that more clearly links activities with goals and performance. Action taken, but not completed.

<u>Research and Development (Includes ITS) Analysis</u>: OMB completed its PART assessment of FHWA's Research and Intelligent Transportation System (ITS) programs during 2004. The following recommendations have been made by OMB:

OMB Recommendation #1: Recommend that the FHWA R&T Program specifically address how the FHWA is implementing the President's investment criteria for R&D in the DOT budget and performance report. This recommendation would be in alignment with OMB's earlier recommendations to the research community at large.

Action Taken: FHWA has taken steps to expand the R&T discussions to include the President's investment criteria in this budget document and future performance reports. Completed. Annual event.

OMB Recommendation #2: Recommend that FHWA R&T Program include a numeric chart showing projects completed by goal in FHWA RD&T annual performance report. Implementing this recommendation would strengthen the linkage between the research roadmaps, the individual research projects and both FHWA and DOT performance goals. This recommendation would address one of the weaknesses in the documentation and goal alignment of the R&T program.

Action Taken: FHWA plans to include the goal chart and linkages in their future performance plans and reports. Completed. Annual event.

OMB Recommendation #3: Recommend that FHWA R&T program require the recipients of earmarked funds to demonstrate how their projects and their results specifically support the FHWA/DOT goal(s). While there is no guarantee that implementing this recommendation would necessarily result in OMB's approval of the earmarking question, it would demonstrate that FHWA is doing everything possible to influence the appropriate use of Research funds.

Action Taken: FHWA has developed contract provisions requiring recipients to demonstrate the link between their projects and FHWA and DOT goals. These provisions will be included in all future RD&T contracts. Completed.

OMB Recommendation #4: Reviewing the project selection process and determining whether projects funded are consistent with the priorities of the new 2007-2011 USDOT Strategic Plan.

Action Taken: New program improvement item. To be implemented in FY 2007. No action taken.

OMB Recommendation #5: Making program improvements consistent with the recommendations of recently completed lab assessments.

Action Taken: New program improvement item. Full implementation to begin in FY 2007. Action taken but not completed.

Emergency Relief Program Analysis: OMB completed its PART assessment of FHWA's Emergency Relief program during 2005. OMB has made the following recommendations concerning program improvements.

OMB Recommendation #1: Incorporating the program within FHWA's Financial Integrity Review and Evaluation procedures.

Action Taken: Emergency Relief will be included in FHWA's Financial Integrity Review and Evaluation procedures. Projects to be reviewed will be determined by an independent accounting team. **Completed.**

OMB Recommendation #2: Establishing in-house guidance and criteria that will focus on project approval performance.

Action Taken: Formalized the ER PART measures within the Divisions Offices. Scheduled August 2006.

Action Taken: Incorporate performance metrics into disaster acknowledgement letter that designates ER event. Letter will be sent to both Division and State Office whenever an event occurs. Completed. April 2006. Continuous Event.

OMB Recommendation #3: Establishing in-house guidance and criteria to ensure all FHWA state division offices approve projects according to the same standards.

Action Taken: ER manual developed that provides standard guidance. Completed: January 2006

Action Taken: Form a team to look at lessons learned from May 2006 disasters. Scheduled: Fall 2006

Action Taken: Incorporate lessons into ER manual update. Scheduled: Spring 2007

TIFIA Program Analysis: OMB completed its review of the Transportation Infrastructure Finance and Innovation Act (TIFIA) credit program during FY 2006. The TIFIA program received a Performance Assessment Rating Tool (PART) score of 69, or adequate, in meeting its goals. As a primary measure of performance, FHWA uses the 3year moving average of the total cost of projects supported by TIFIA as a proxy for the degree to which TIFIA assistance promotes such investment. This measure captures the impact of TIFIA funds as well as the program's effectiveness in leveraging resources from other sources. The TIFIA program supports a relatively small number of large-scale projects, resulting in a great deal of volatility in the level of investment on an annual basis. By tracking the 3-year moving average, FHWA is able to smooth out annual fluctuations, providing a more accurate picture of trends in program operations than the annual level of investment.

The PART analysis indicated that the TIFIA program needs to set more ambitious goals, achieve better results, improve accountability, and strengthen its management practices. The following are recommended actions:

OMB recommendation #1: Develop loan approval criteria to ensure that loan applicants take full advantage of private sector financing opportunities.

OMB recommendation #2: Implement a strategy for encouraging borrowers to seek and private lenders to offer loans guaranteed by the TIFIA program.

OMB recommendation #3: Develop loan approval criteria ensuring that the TIFIA program targets projects that were not able to access capital through other means.

Actions taken: These three recommendations are new improvement items. Full implementation to begin in FY 2007.

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STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES		FY 2006 <u>ACTUAL</u>		FY 2007 CONTINUING <u>RESOLUTION</u>		FY 2007 PRESIDENT'S <u>BUDGET</u>		TOTAL 2008 REQUEST
I. Safety								
A. Reduce Transportation-Related Deaths and Injuries								
Federal-aid Highways (Excludes LAE)	\$	8,266,041	\$	7,358,098	\$	9,147,878	\$	9,274,870
Transp. Infrastructure Finance and Innov. Act (TIFIA)	-	21,016	-	19,905	-	23,638		24,393
Surface Transportation Program		1,100,319		989,066		1,328,262		1,391,395
National Highway System		1,021,937		857,464		1,151,571		1,206,308
Interstate Maintenance		876,501		735,592		987,923		1,034,883
Bridge Program		782,909		657,095		882,510		924,460
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program		855,716		705,715		944,286		992,497
Equity Bonus		1,345,047		1,385,939		1,618,902		1,887,426
Equity Bonus (Exempt)		146,970		146,970		146,970		146,970
Federal Lands Highways		161,331		146,219		198,086		208,950
Appalachian Development Highway System		71,153		60,501		80,455		80,563
High Priority Projects		510,992		425,804		574,757		564,970
Projects of National and Regional Significance		64,355		67,032		90,482		88,941
ITS Research		52,298		52,298		58,824		57,823
Transportation Research, Training and Education		14,123		15,619		15,885		15,614
Miscellaneous Programs		1,218,374		1,069,879		1,022,327		626,677
Emergency Relief Program		23,000		23,000		23,000		23,000
Appalachian Development Highway Systems (ADHS)		4,554		18,936				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	8,270,595	\$	7,377,034	\$	9,147,878	\$	9,274,870
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	78,500		83,600	\$	86,379		89,303
TOTAL REQUEST		8,349,095	\$	7,460,634	\$	9,234,257	\$	9,364,173
Mandatory [non-add]	\$	169,970	\$	169,970	\$	169,970	\$	169,970
Discretionary [non-add]	\$	8,179,125	\$	7,290,664	\$	9,064,287	\$	9,194,203
FTE (GOE & Federal-aid Direct)		601		640		699		692
II. Reduced Congestion								
A. Reduction in urban congestion								
Federal-aid Highways (Excludes LAE)	\$	5,833,758	\$	5,220,226	\$	6,473,435	\$	6,547,598
Transp. Infrastructure Finance and Innov. Act (TIFIA)	-	17,968	-	17,018		20,211		20,856
Surface Transportation Program		790,795		710,837		954,616		999,989
National Highway System		832,149		698,221		937,708		982,279
Interstate Maintenance		840,245		705,165		947,058		992,076
Bridge Program		620,881		521,105		699,869		733,137
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program								
Equity Bonus		966,680		996,068		1,163,498		1,356,485
Equity Bonus (Exempt)		105,627		105,627		105,627		105,627
Federal Lands Highways		115,948		105,087		142,364		150,171
Appalachian Development Highway System		78,861		67,055		89,171		89,291
High Priority Projects		436,898		364,062		491,417		483,049
Projects of National and Regional Significance		64,630		67,320		90,869		89,322
ITS Research		11,395		11,395		12,817		12,598
Transportation Research, Training and Education		59,511		65,819		66,938		65,798
Miscellaneous Programs		875,640		768,917		734,742		450,390
Emergency Relief Program		16,530		16,530		16,530		16,530
Congestion Initiative Value Pricing Program								
Appalachian Development Highway Systems (ADHS)		3,273		13,609				[\$100,000]
Emergency Relief Supplemental (GF)		983,924						
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	6,820,955	\$	5,233,835	\$	6,473,435	\$	6,547,598
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	64,741		59,312	\$	61,126		63,043
TOTAL REQUEST	. \$	6,885,696	\$	5,293,147	\$	6,534,561	\$	6,610,641
FTE (GOE & Federal-aid Direct)		496		454		494		488

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES	FY 2006 <u>ACTUAL</u>	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	TOTAL 2008 <u>REQUEST</u>
II. Reduced Congestion (continued)				
B. Increased use of integrated ITS networks and new incident management approaches	2 0 (9 0 5 2	¢ 0.655.005	¢ 2 202 502	¢ 2,221,227
Federal-aid Highways (Excludes LAE) <u>\$</u> Transp. Infrastructure Finance and Innov. Act (TIFIA)	2,968,053 9,142	<u>\$ 2,655,905</u> 8,659	<u>\$ 3,293,502</u> 10,283	<u>\$ 3,331,236</u> 10,611
Surface Transportation Program	402,334	361,654	485,682	508,767
National Highway System	423,374	355,235	477,079	499,756
Interstate Maintenance	427,493	358,768	481,837	504,740
Bridge Program	315,887	265,124	356,074	373,000
Congestion Mitigation & Air Quality Improvement				
Highway Safety Improvement Program				
Equity Bonus	491,819	506,772	591,955	690,142
Equity Bonus (Exempt)	53,740	53,740	53,740	53,740
Federal Lands Highways	58,991	53,465	72,431	76,403
Appalachian Development Highway System	40,123	34,116	45,367	45,429
High Priority Projects	222,282	185,225	250,019	245,762
Projects of National and Regional Significance	32,882	34,250	46,232	45,444
ITS Research	5,797	5,797	6,521	6,410
Transportation Research, Training and Education	30,278 445,501	33,487 391,203	34,056 373,816	33,476 229,146
Miscellaneous Programs Emergency Relief Program	443,501 8,410	8,410	8,410	229,146 8,410
Congestion Initiative Real-time System Mgmt Info Program & Research			3,410	[\$50,000]
Appalachian Development Highway Systems (ADHS)	1,665	6,924		[\$50,000]
Emergency Relief Supplemental (GF)	500,593			
PROGRAM FUND:				
SUBTOTAL PROGRAM FUND \$	3,470,311	\$ 2,662,829	\$ 3,293,502	\$ 3,331,236
LIMITATION ON ADMINISTRATIVE EXPENSES \$	32,938	30,176	\$ 31,099	32,075
TOTAL REQUEST\$	3,503,249	\$ 2,693,005	\$ 3,324,601	\$ 3,363,311
FTE (GOE & Federal-aid Direct)	252	231	251	248
II. Reduced Congestion (continued)				
C. Increased investment in Corridors of the Future program				
Federal-aid Highways (Excludes LAE)		<u>\$ 1,282,162</u>	<u>\$ 1,589,967</u>	<u>\$ 1,608,183</u>
Transp. Infrastructure Finance and Innov. Act (TIFIA)	4,413	4,180	4,964	5,123
Surface Transportation Program	194,230	174,592	234,467	245,611
National Highway System	204,387	171,493	230,314	241,262
Interstate Maintenance	206,376	173,198	232,611	243,668
Bridge Program	152,497	127,991	171,898	180,069
Congestion Mitigation & Air Quality Improvement Highway Safety Improvement Program				
Equity Bonus	237,430	244,648	285,771	333,172
Equity Bonus (Exempt)	25,943	25,943	25,943	25,943
Federal Lands Highways	28,478	25,811	34,967	36,884
Appalachian Development Highway System	19,369	16,470	21,902	21,931
High Priority Projects	107,308	89,419	120,699	118,644
Projects of National and Regional Significance	15,874	16,535	22,319	21,939
ITS Research	2,799	2,799	3,148	3,094
Transportation Research, Training and Education	14,617	16,166	16,441	16,161
Miscellaneous Programs	215,070	188,857	180,463	110,622
Emergency Relief Program	4,060	4,060	4,060	4,060
Congestion Initiative Corridors of the Future				[\$25,000]
Appalachian Development Highway Systems (ADHS)	804	3,343		
Emergency Relief Supplemental (GF)	241,665			
PROGRAM FUND:				
SUBTOTAL PROGRAM FUND \$		\$ 1,285,505	\$ 1,589,967	\$ 1,608,183
LIMITATION ON ADMINISTRATIVE EXPENSES \$	15,901	14,568	\$ 15,013	15,484
TOTAL REQUEST\$	1,691,221	\$ 1,300,073	\$ 1,604,980	\$ 1,623,667
FTE (GOE & Federal-aid Direct)	122	112	121	120

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES		FY 2006 <u>ACTUAL</u>		FY 2007 CONTINUING <u>RESOLUTION</u>		FY 2007 RESIDENT'S <u>BUDGET</u>		TOTAL 2008 REQUEST
II. Reduced Congestion (continued)								
D. Improved infrastructure	¢	10 104 000	¢	0 127 192	¢	11 020 122	¢	11 210 616
Federal-aid Highways (Excludes LAE)	<u>\$</u>	10,184,998	<u>\$</u>	9,137,182	<u>\$</u>	11,232,133	\$	11,318,616
Transp. Infrastructure Finance and Innov. Act (TIFIA) Surface Transportation Program		34,676 1,052,479		32,843 946,063		39,002 1,270,510		40,246 1,330,900
National Highway System		1,605,900		1,347,443		1,809,610		1,330,900
Interstate Maintenance		1,314,751		1,103,388		1,481,884		1,552,324
Bridge Program		953,106		799,942		1,074,358		1,125,429
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program								
Equity Bonus		1,871,370		1,928,263		2,252,384		2,625,983
Equity Bonus (Exempt)		204,479		204,479		204,479		204,479
Federal Lands Highways		217,446		197,078		266,986		281,627
Appalachian Development Highway System		138,354		117,640		156,439		156,648
High Priority Projects		843,136		702,576		948,349		932,201
Projects of National and Regional Significance		88,871		92,569		124,950		122,823
ITS Research		19,896		19,896		22,379		21,998 115,435
Transportation Research, Training and Education Miscellaneous Programs		104,406		115,474		117,434		871,896
Emergency Relief Program		1,695,128 41,000		1,488,528 41,000		1,422,370 41,000		871,896 41,000
Appalachian Development Highway Systems (ADHS)		6,336		26,347				
Emergency Relief Supplemental (GF)		1,726,182						
		,, .						
PROGRAM FUND:			<u>_</u>		¢		<i>•</i>	
SUBTOTAL PROGRAM FUND	\$	11,917,516	\$	9,163,529	\$	11,232,133	\$	11,318,616
LIMITATION ON ADMINISTRATIVE EXPENSES TOTAL REQUEST	\$. \$	113,117 12,030,633	\$	103,845 9,267,374	\$ \$	106,061 11,338,194	\$	108,980 11,427,596
FTE (GOE & Federal-aid Direct)	• Φ	12,050,055	φ	9,207,374 794	φ	11,338,194 856	Φ	843
TOTAL CONGESTION:	¢	22.004.102	٩	10 245 600	¢	22 500 025	¢	22.005.622
Program Fund	\$	23,884,102	\$	18,345,698	\$ ¢	22,589,037	\$	22,805,633
Congestion Initiative Program Funds Limitation on Administrative Expenses	\$ \$	226,697	\$ \$	207,901	\$ \$	213,299	\$	[\$175,000] 219,582
TOTAL REQUEST	ۍ \$	220,097 24,110,799	э \$	18,553,599	ֆ \$	213,299 22,802,336	ֆ \$	23,025,215
Mandatory [non-add]	\$	459,789	\$	459,789	\$	459,789	\$	459,789
Discretionary [non-add]	\$	23,651,010	\$	18,093,810	\$	22,342,547	\$	22,565,426
FTE (GOE & Federal-aid Direct)		1,736		1,591		1,722		1,699
III. Global Connectivity								
A. Safer, more efficient movement of passengers and cargo through the supply chain								
Federal-aid Highways (Excludes LAE)	\$	785,363	\$	695,511	\$	871,409	\$	882,117
Transp. Infrastructure Finance and Innov. Act (TIFIA)		4,203		3,981		4,728		4,879
Surface Transportation Program		95,680		86,006		115,501		120,991
National Highway System		145,991		122,495		164,510		172,330
Interstate Maintenance		39,841		33,436		44,906		47,040
Bridge Program		136,158		114,277		153,480		160,776
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program		116 061		120 516		140 774		
Equity Bonus		116,961 12,780		120,516 12,780		140,774 12,780		164,124 12,780
Equity Bonus (Exempt) Federal Lands Highways		12,780		12,780		12,780		12,780
Appalachian Development Highway System		3,953		3,361		4,470		4,476
High Priority Projects		102,198		85,161		114,951		112,994
Projects of National and Regional Significance		3,065		3,192		4,309		4,235
ITS Research		2,558		2,558		2,877		2,828
Transportation Research, Training and Education								
Miscellaneous Programs		105,946		93,033		88,898		54,494
Emergency Relief Program		2,000		2,000		2,000		2,000
Appalachian Development Highway Systems (ADHS)		396		1,647				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	785,759	\$	697,158	\$	871,409	\$	882,117
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	7,458		7,901	\$	8,228		8,493
TOTAL REQUEST	. \$	793,217	\$	705,059	\$	879,637	\$	890,610
FTE (GOE & Federal-aid Direct)		57		60		66		66

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES		FY 2006 <u>ACTUAL</u>		FY 2007 ONTINUING SOLUTION	I	FY 2007 PRESIDENT'S <u>BUDGET</u>	<u>1</u>	TOTAL 2008 REQUEST
III. Global Connectivity (continued)								
B. Enhanced competitiveness of U.S. transport providers and manufacturers in the glo	obal m	arketnlace						
Federal-aid Highways (Excludes LAE)	\$	329,861	\$	295,199	\$	365,401	\$	369,135
Transp. Infrastructure Finance and Innov. Act (TIFIA)	<u> </u>	1,051	<u></u>	995	-	1,182		1,220
Surface Transportation Program		47,840		43,003		57,751		60,495
National Highway System		48,664		40,832		54,837		57,443
Interstate Maintenance		39,841		33,436		44,906		47,040
Bridge Program		34,040		28,569		38,370		40,194
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program								
Equity Bonus		58,480		60,258		70,387		82,062
Equity Bonus (Exempt)		6,390		6,390		6,390		6,390
Federal Lands Highways		7,014		6,357		8,612		9,085
Appalachian Development Highway System		3,953		3,361		4,470		4,476
High Priority Projects		25,550		21,290		28,738		28,248
Projects of National and Regional Significance		3,065		3,192		4,309		4,235
ITS Research								
Transportation Research, Training and Education								
Miscellaneous Programs		52,973		46,516		44,449		27,247
Emergency Relief Program		1,000		1,000		1,000		1,000
Appalachian Development Highway Systems (ADHS)		198		823				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	330,059	\$	296,022	\$	365,401	\$	369,135
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	3,133		3,355	\$	3,450		3,554
TOTAL REQUEST	. \$	333,192	\$	299,377	\$	368,851	\$	372,689
FTE (GOE & Federal-aid Direct)		24		26		28		28
TOTAL GLOBAL CONNECTIVITY:								
Program Fund	\$	1,115,818	\$	993,180	\$	1,236,810	\$	1,251,252
Limitation on Administrative Expenses	\$	10,591	\$	11,256	\$	11,678	\$	12,047
TOTAL REQUEST	\$	1,126,409	\$	1,004,436	\$	1,248,488	\$	1,263,299
Mandatory [non-add]	\$	22,170	\$	22,170	\$	22,170	\$	22,170
Discretionary [non-add]	\$	1,104,239	\$	982,266	\$	1,226,318	\$	1,241,129
FTE (GOE & Federal-aid Direct)		81		86		94		94
IV. Environmental Stewardship								
A. Reduction in pollution and other adverse environmental effects from transportation		-			^		.	
Federal-aid Highways (Excludes LAE)	\$	3,858,731	<u>\$</u>	4,297,343	<u>\$</u>	5,468,013	\$	5,594,965
Transp. Infrastructure Finance and Innov. Act (TIFIA)		10,245		9,703		11,524		11,892
Surface Transportation Program		944,840		849,306		1,140,573		1,194,785
National Highway System		474,471		398,108		534,658		560,072
Interstate Maintenance		189,244		158,821		213,301		223,441
Bridge Program		331,885		278,551		374,108		391,891
Congestion Mitigation & Air Quality Improvement		359,256		1,151,139		1,545,901		1,619,376
Highway Safety Improvement Program								
Equity Bonus		570,183		587,518		686,274		800,105
Equity Bonus (Exempt)		62,303		62,303		62,303		62,303
Federal Lands Highways		75,405		68,341		92,584		97,661
Appalachian Development Highway System		34,588		29,410		39,110		39,163
High Priority Projects		249,109		207,579		280,194		275,423
Projects of National and Regional Significance		29,879		31,122		42,009		41,294
ITS Research								
Transportation Research, Training and Education		10,088		11,157		11,346		11,153
Miscellaneous Programs		516,485		453,535		433,378		265,656
Emergency Relief Program		750		750		750		750
Appalachian Development Highway Systems (ADHS)		1,931		8,027				
DDOCDAM ETIND.								
PROGRAM FUND:	¢	2 9/0 //2	¢	4 205 270	¢	E 470 010	¢	E E04.075
SUBTOTAL PROGRAM FUND	\$ \$	3,860,662	\$	4,305,370	\$ ¢	5,468,013	\$	5,594,965
LIMITATION ON ADMINISTRATIVE EXPENSES TOTAL REQUEST		36,643 3,897,305	¢	48,791 4 354 161	\$ ¢	51,632 5 519 645	¢	53,871 5 648 836
e e e e e e e e e e e e e e e e e e e	\$, ,	\$	4,354,161	\$	5,519,645	\$	5,648,836
FTE (GOE & Federal-aid Direct)		280		373		417		417

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES		FY 2006 <u>ACTUAL</u>		FY 2007 ONTINUING ESOLUTION	1	FY 2007 PRESIDENT'S <u>BUDGET</u>	Ŧ	TOTAL 2008 REQUEST
IV. Environmental Stewardship (continued)								
B. Streamlined environmental review of transportation infrastructure projects								
Federal-aid Highways (Excludes LAE)	\$	83,375	\$	76,715	\$	95,263	\$	96,385
Transp. Infrastructure Finance and Innov. Act (TIFIA)		263		249		295		305
Surface Transportation Program		11,960		10,751		14,438		15,124
National Highway System		12,166		10,208		13,709		14,361
Interstate Maintenance		9,960		8,359		11,226		11,760
Bridge Program		8,510		7,142		9,593		10,048
Congestion Mitigation & Air Quality Improvement		910		2,914		3,914		4,100
Highway Safety Improvement Program Equity Bonus		14 620		15.065				20.516
1 2		14,620		15,065		17,597		20,516
Equity Bonus (Exempt)		1,598 1,754		1,598 1,589		1,598 2,153		1,598 2,271
Federal Lands Highways Appalachian Development Highway System		988		840		1,117		1,119
		6,387		5,323		7,184		7,062
High Priority Projects Projects of National and Regional Significance		766		5,323 798		1,077		1,059
ITS Research		700		/98		1,077		1,039
Transportation Research, Training and Education								
Miscellaneous Programs		13,243		11,629		11,112		6,812
Emergency Relief Program		250		250		250		250
Appalachian Development Highway Systems (ADHS)		230 50		206		230		230
Apparacinan Development Highway Systems (ADHS)		50		200				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	83,425	\$	76,921	\$	95,263	\$	96,385
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	792	ψ	872	\$	900	φ	928
TOTAL REQUEST		84,217	\$	77,793	\$	96,163	\$	97,313
FTE (GOE & Federal-aid Direct)	• φ	6	Ψ	7	Ψ	50,105	Ψ	7
TOTAL ENVIRONMENT:								
Program Fund	\$	3,944,087	\$	4,382,291	\$	5,563,276	\$	5,691,350
Limitation on Administrative Expenses	\$	37,435	\$	49,663	\$	52,532	\$	54,799
TOTAL REQUEST	\$	3,981,522	\$	4,431,954	\$	5,615,808	\$	5,746,149
Mandatory [non-add]	\$	64,901	\$	64,901	\$	64,901	\$	64,901
Discretionary [non-add]	\$	3,916,621	\$	4,367,053	\$	5,550,907	\$	5,681,248
FTE (GOE & Federal-aid Direct)		286		380		425		424
V. Security, Preparedness, and Response				6 <i>i</i>				
A. Rapid, effective decision-making in emergencies affecting the transport. sector, and			-	-		0	¢	271 007
Federal-aid Highways (Excludes LAE)	<u>\$</u>	331,625	\$	297,151	\$	367,387	\$	371,087
Transp. Infrastructure Finance and Innov. Act (TIFIA)		1,051		995		1,182		1,220
Surface Transportation Program		47,840		43,003		57,751		60,495
National Highway System Interstate Maintenance		48,664		40,832		54,837		57,443
		39,841		33,436		44,906		47,040
Bridge Program		34,040		28,569		38,370		40,194
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program								 82.062
Equity Bonus		58,480		60,258		70,387		82,062
Equity Bonus (Exempt)		6,390		6,390		6,390		6,390
Federal Lands Highways		7,014		6,357		8,612		9,085
Appalachian Development Highway System		3,953		3,361		4,470		4,476
High Priority Projects		25,550		21,290		28,738		28,248
Projects of National and Regional Significance		3,064		3,192		4,309		4,235
ITS Research		1 765						1.052
Transportation Research, Training and Education Miscellaneous Programs		1,765		1,952		1,986		1,952
e		52,973		46,516		44,449		27,247
Emergency Relief Program Appalachian Development Highway Systems (ADHS)		1,000 198		1,000 823		1,000		1,000
11		1,0		020				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	331,823	\$	297,974	\$	367,387	\$	371,087
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	3,149		3,377	\$	3,469		3,573
TOTAL REQUEST	. \$	334,972	\$	301,351	\$	370,856	\$	374,660
Mandatory [non-add]	\$	7,390	\$	7,390	\$	7,390	\$	7,390
Discretionary [non-add]	\$	327,582	\$	293,961	\$	363,466	\$	367,270
FTE (GOE & Federal-aid Direct)		24		26		28		28

		FY 2007	FY 2007	TOTAL
STRATEGIC & PERFORMANCE GOALS	FY 2006	CONTINUING	PRESIDENT'S	2008
by PROGRAM ACTIVITIES	ACTUAL	RESOLUTION	BUDGET	REQUEST

VI. Organizational Excellence

Federal-aid Highways (Excludes LAE)	\$	486,384	\$	456,766	\$	545.070	\$	goals 545,32
Transp. Infrastructure Finance and Innov. Act (TIFIA)	Ψ	1,051	Ψ	995	Ψ	1,182	Ψ	1,22
Surface Transportation Program		95,680		86,006		115,501		120,9
National Highway System		48,664		40,832		54,837		57,4
Interstate Maintenance		48,004		40,832				
								40,1
Bridge Program		34,040		28,569		38,370		,
Congestion Mitigation & Air Quality Improvement		3,638		11,657		15,655		16,3
Highway Safety Improvement Program		8,644		7,128		9,538		10,0
Equity Bonus		116,961		120,516		140,774		164,1
Equity Bonus (Exempt)		12,780		12,780		12,780		12,7
Federal Lands Highways		14,029		12,715		17,225		18,1
Appalachian Development Highway System								-
High Priority Projects		25,550		21,290		28,738		28,2
Projects of National and Regional Significance								-
ITS Research								-
Transportation Research, Training and Education		17,401		19,245		19,572		19,2
Miscellaneous Programs		105,946		93,033		88,898		54,4
Emergency Relief Program		2,000		2,000		2,000		2,0
Appalachian Development Highway Systems (ADHS)		395		1,647				-
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	486,779	\$	458,413	\$	545,070	\$	545,
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	4,620		5,195	\$	5,147		5,
TOTAL REQUEST	\$	491,399	\$	463,608	\$	550,217	\$	550,
Mandatory [non-add]	\$	14,780	\$	14,780	\$	14,780	\$	14,
Discretionary [non-add]	\$	476,619	\$	448,828	\$	535,437	\$	535,
FTE (GOE & Federal-aid Direct)		35		40		42		
FHWA PERFORMANCE GOALS Federal-aid Highways (Excludes LAE)	\$	34,561,040	\$	31,772,258	\$	39,449,458	\$	39,939,5
Transp. Infrastructure Finance and Innov. Act (TIFIA)		105.079	-	99,523		118,191		121,9
Surface Transportation Program		4,783,997		4,300,287		5,775,052		6,049,
National Highway System		4,866,367		4,083,163		5,483,670		5,744,3
Interstate Maintenance		3,984,093		3,343,599		4,490,558		4,704,0
Bridge Program		3,403,953		2,856,934		3,837,000		4,019,
Congestion Mitigation & Air Quality Improvement		363,804		1,165,710		1,565,470		1,639,
Highway Safety Improvement Program		864,360		712,843		953,824		1,002,
Equity Bonus		5,848,031		6,025,821		7,038,703		8,206,2
Equity Bonus (Exempt)		639,000		639,000		639,000		639,
Federal Lands Highways		701,439		635,734		861,245		908,
		395,295		336,115		446,971		908, 447,
Appalachian Development Highway System								
High Priority Projects		2,554,960		2,129,019		2,873,784		2,824,
Projects of National and Regional Significance		306,451		319,202		430,865		423,
ITS Research		94,743		94,743		106,566		104,
Transportation Research, Training and Education		252,189		278,919		283,658		278,
Miscellaneous Programs		5,297,279		4,651,646		4,444,902		2,724,
Emergency Relief Program		100,000		100,000		100,000		100,
Congestion Initiative								[\$175,0
Appalachian Development Highway Systems (ADHS)		19,800		82,332				-
Emergency Relief Supplemental (GF)		3,452,364						-
	٠	20.022.204	¢	21 054 500		20 440 450	٠	20.020
FOTALS: Appropriations, Obligation Limitation, and Exempt Programs/CA Limitation on Administrative Expenses	\$ \$	38,033,204 360,992	\$ \$	31,854,590 360,992	\$ \$	39,449,458 372,504	\$ \$	39,939, 384,
GRAND TOTAL	\$	38,394,196	\$	32,215,582	\$	39,821,962	\$	40,324,
Mandatory [non-add]	\$	739,000	\$	739,000	\$	739,000	\$	739,
	¢	27 655 106	\$	31,476,582	¢	39,082,962	\$	39,585,
Discretionary [non-add]	\$	37,655,196	Φ	31,470,382	\$	39,082,902	æ	39,303,

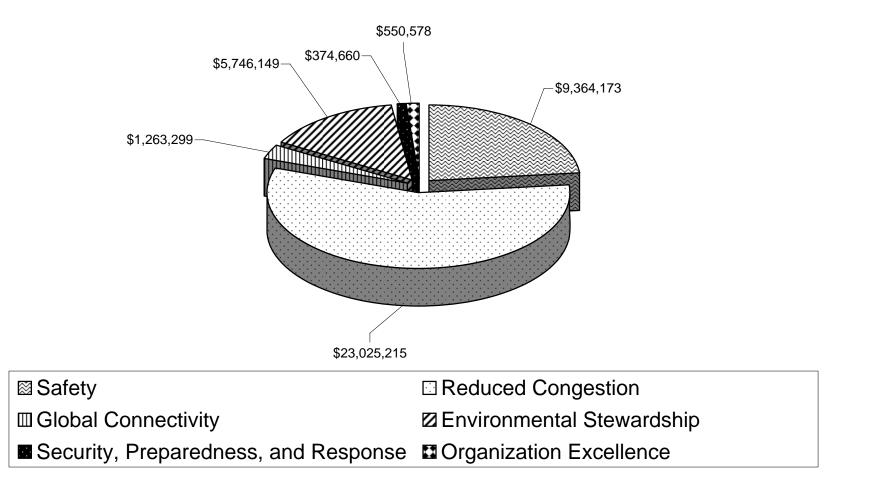
1/ Breakdown among goal areas for FY 2006 is estimated and assumptions made for FY 2007 and FY 2008 are consistent with FY 2006.

[] Indicates non add.

EXHIBIT IV-2 FY 2008 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND PERFORMANCE GOAL FEDERAL HIGHWAY ADMINISTRATION Appropriations, Obligation Limitations, and Exempt Programs (\$000)

-	FY 2000 ACTUA		FY 2007 CONTINU RESOLUT	ING	FY 2007 PRESIDEN BUDGE	T'S	TOTAI FY 2003 REQUES	8
APPROPRIATION / PROGRAM <u>ACTIVITY / PERFORMANCE GOAL</u>	<u>(\$000)</u>	<u>FTEs</u>	<u>(\$000)</u>	<u>FTEs</u>	<u>(\$000)</u>	<u>FTEs</u>	<u>(\$000)</u>	<u>FTEs</u>
Federal-aid Highways (Excludes LAE)	34,561,040		31,772,258		39,449,458		39,939,519	
Safety	8,266,041		7,358,098		9,147,878		9,274,870	
Reduced Congestion	20,419,660		18,295,475		22,589,037		22,805,633	
Global Connectivity	1,115,224		990,710		1,236,810		1,251,252	
Environmental Stewardship	3,942,106		4,374,058		5,563,276		5,691,350	
Security, Response, and Preparedness	331,625		297,151		367,387		371,087	
Oganizational Excellence	486,384		456,766		545,070		545,327	
Limitation on Administrative Expenses	360,992	2,763	360,992	2,763	372,504	3,010	384,556	2,978
Safety	78,500		83,600		86,379		89,303	
Reduced Congestion	226,697		207,901		213,299		219,582	
Global Connectivity	10,591		11,256		11,678		12,047	
Environmental Stewardship	37,435		49,663		52,532		54,799	
Security, Response, and Preparedness	3,149		3,377		3,469		3,573	
Oganizational Excellence	4,620		5,195		5,147		5,251	
Appalachian Development Highway Systems (ADHS)	19,800		82,332					
Safety	4,554		18,936					
Reduced Congestion	12,078		50,223					
Global Connectivity	594		2,470					
Environmental Stewardship	1,981		8,233					
Security, Response, and Preparedness	198		823					
Oganizational Excellence	395		1,647					
Emergency Relief Supplementa	3,452,364							
Safety								
Reduced Congestion	3,452,364							
Global Connectivity								
Environmental Stewardship								
Security, Response, and Preparedness								
Oganizational Excellence								
TOTALS: Appropriations, Obligation Limitation,								
and Exempt Programs/CA	38,033,204		31,854,590		39,449,458		39,939,519	
Limitation on Administrative Expenses	360,992		360,992		372,504		384,556	
GRAND TOTAL	38,394,196		32,215,582		39,821,962		40,324,075	
FTE (Direct funded, exclude MTF and BTS)		2,763		2,763		3,010		2,978

FHWA FY 2008 Funding Distribution by Goal



FEDERAL HIGHWAY ADMINISTRATION FISCAL YEAR 2008 PERFORMANCE BUDGET

NARRATIVE JUSTIFICATION

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ORGANIZATIONAL EXCELLENCE	85

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SAFETY

DOT Performance Goal: Reduction in transportation-related deaths and injuries.

This funding request contributes to the DOT Safety strategic objective and FHWA's performance target to reduce highway fatalities to 1.0 per 100 million vehicle-miles of travel by 2011.

20012002200320042005200620072008Target:1.501.401.401.381.381.381.381.37Actual:1.511.511.481.44(r)1.45 * 1.44 #	Fatalities per 100 million vehicle-miles of travel (VMT).									
e		2001	2002	2003	2004	2005	2006	2007	2008	
Actual: 1.51 1.51 1.48 1.44(r)1.45 * 1.44 #	Target:	1.50	1.40	1.40	1.38	1.38	1.38	1.38	1.37	
	Actual:	1.51	1.51	1.48	1.44(1	r)1.45 *	1.44 #			

Reduce the rate of passenger vehicle occupant highway fatalities per 100 million passenger vehicle miles traveled (VMT).

	2003	2004	2005	2006	2007	2008
Target:	n/a	n/a	n/a	1.12	1.10	1.06
Actual:	1.21	1.17	1.14			

Reduce the rate of non-occupant highway fatalities per 100 million VMT.

	2003	2004	2005	2006	2007	2008
Target: Actual:	n/a 0.19		n/a 0.20	0.16	0.15	0.19

Reduce the expected rate of increase in motorcycle rider highway fatalities per 1,000 motorcycle registrations.

	2005	2006	2007	2008
Target:	n/a	0.75	0.76	0.76
Actual:	0.73			

Reduce the rate of large truck and bus fatalities per 100 million total vehicle miles traveled (VMT).

	2005	2006	2007	2008
Target:	n/a	0.179	0.175	0.171
Actual:	0.184			

(r) Revised; * Preliminary Estimate; #Projection

Funding for this performance goal: \$9.4 billion.

This request allows the FHWA to continue delivering technical assistance, training, and public awareness programs to advance priorities in the delivery of national safety programs. Funds from this request will be used for a full range of highway safety related program efforts including: the implementation of new SAFETEA-LU provisions; redesign and construction of roadways and intersections to eliminate hazards; installation of safety improvement countermeasures, such as guardrails and rumble strips; and collection of crash and other safety-related data. Funds will also be used to assist state and metropolitan areas in developing plans and policies to improve safety and to educate decision makers within the transportation planning process on the importance of safety.

The resources requested to achieve this goal are:

(\$000)

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES		FY 2006 <u>ACTUAL</u>		FY 2007 CONTINUING <u>RESOLUTION</u>		FY 2007 PRESIDENT'S <u>BUDGET</u>		TOTAL 2008 EQUEST
I. Safety								
A. Reduce Transportation-Related Deaths and Injuries								
Federal-aid Highways (Excludes LAE)	\$	8,266,041	\$	7,358,098	\$	9,147,878	\$	9,274,870
Transp. Infrastructure Finance and Innov. Act (TIFIA)		21,016		19,905		23,638		24,393
Surface Transportation Program		1,100,319		989,066		1,328,262		1,391,395
National Highway System		1,021,937		857,464		1,151,571		1,206,308
Interstate Maintenance		876,501		735,592		987,923		1,034,883
Bridge Program		782,909		657,095		882,510		924,460
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program		855,716		705,715		944,286		992,497
Equity Bonus		1,345,047		1,385,939		1,618,902		1,887,426
Equity Bonus (Exempt)		146,970		146,970		146,970		146,970
Federal Lands Highways		161,331		146,219		198,086		208,950
Appalachian Development Highway System		71,153		60,501		80,455		80,563
High Priority Projects		510,992		425,804		574,757		564,970
Projects of National and Regional Significance		64,355		67,032		90,482		88,941
ITS Research		52,298		52,298		58,824		57,823
Transportation Research, Training and Education		14,123		15,619		15,885		15,614
Miscellaneous Programs		1,218,374		1,069,879		1,022,327		626,677
Emergency Relief Program		23,000		23,000		23,000		23,000
Appalachian Development Highway Systems (ADHS)		4,554		18,936				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	8,270,595	\$	7,377,034	\$	9,147,878	\$	9,274,870
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	78,500		83,600	\$	86,379	\$	89,303
TOTAL REQUEST	. \$	8,349,095	\$	7,460,634	\$	9,234,257	\$	9,364,173
Mandatory [non-add]	\$	169,970	\$	169,970	\$	169,970	\$	169,970
Discretionary [non-add]	\$	8,179,125	\$	7,290,664	\$	9,064,287	\$	9,194,203
FTE (GOE & Federal-aid Direct)		601		640		699		692

Marginal Cost of Performance - Safety

SAFETEA-LU significantly increased funding dedicated towards Safety goal-related programs beginning in 2006 and established several new or expanded safety programs including the Highway Safety Improvement Program (HSIP) and Safe Routes to School (SRS) Program. This increase in resources will strengthen the ability of FHWA to provide the technical assistance, training, and delivery of national safety programs requested by the States to impact the overall fatality rate, thereby improving Agency operations and saving lives.

As noted in the tables below, the FHWA will focus its efforts on achieving a reduction in the overall highway fatality rate by advancing program initiatives that save lives in roadway departure, intersection, and pedestrian-related crashes. To project the number of lives saved, the fatality rate for each of these three crash types in 2003 is the baseline for comparison of actual lives saved in 2004 and subsequent years. Estimates of lives saved in 2006, 2007 and 2008 are based on a target fatality rate for each crash type and estimated vehicle miles traveled (VMT). While it is difficult to generalize, findings from a wide range of studies have led us to estimate that approximately one-third of the estimated total lives saved in future years will be due to engineering improvements resulting from program increases authorized in SAFETEA-LU. When combined, a projected 1,470 additional lives will be saved in 2008, compared with a baseline of 39,698 lives lost due to these three types of crashes. The incremental improvement from 2007 to 2008, based on a program funding increase of \$130 million, is 250 lives saved.

<u>Agency Output or Outcome Measure Associated with this Program Increase(s)</u>: Highway Fatality Rate, expressed as the number of lives saved in roadway departure per vehicle miles traveled, and the intersection-related and pedestrian-related crashes per population.

<u>Performance Measure:</u> Number of lives saved in roadway departure crashes. Baseline is 0.88 fatalities per hundred million vehicle miles of travel (VMT) in 2003. Target rate for 2008 is 0.86 fatalities per hundred million VMT.

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>
Baseline Performance Level					
Target Actual	N/T 523	N/T 312	470 (r) N/A) 630 (r) N/A	800 N/A

<u>Performance Measure</u>: Number of lives saved in intersection-related passenger vehicle crashes. Baseline is 3.22 fatalities per hundred thousand population or 9,362 fatalities in 2003. Target rate for 2008 is 3.14 fatalities per hundred thousand population.

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>
Baseline Performance Level					
Target	N/T	N/T	240 (r)		
Actual	337	233	N/A	N/A	N/A

<u>Performance Measure:</u> Number of lives saved in pedestrian-related passenger vehicle crashes. Baseline is 1.64 fatalities per hundred thousand population or 4,774 fatalities in 2003. Target rate for 2008 is 1.5 fatalities per hundred thousand population.

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>
Baseline Performance Level					
Target	N/T	N/T	270 (r)	350 (r)	430
Actual	180	193	N/A	N/A	N/A
Incremental Performance Targ	et				
With Program Changes				240	250
(Total) Performance Target					
With Program Changes				1,220	1,470

Note: Actual VMT in 2004 was 2,963 million miles. The estimates used for VMT are 3,008 in 2005, 3,011 in 2006, 3,057 in 2007, and 3,145 in 2008.

N/T - No Target. N/A - Not Available. r - Revised

Performance Issue

After two consecutive years of decline in overall highway fatalities and impaired driving fatalities, and having achieved the lowest recorded fatality rate in history, the data reveal a setback in 2005. Total fatalities increased by 1.4 percent over 2004, to a total of 43,443 in 2005, a figure which includes a minimal decrease of alcohol-related fatalities by 0.2 percent to a total of 16,885 in 2005. Recent trends and annual targets for this performance measure are illustrated in Figure 1.

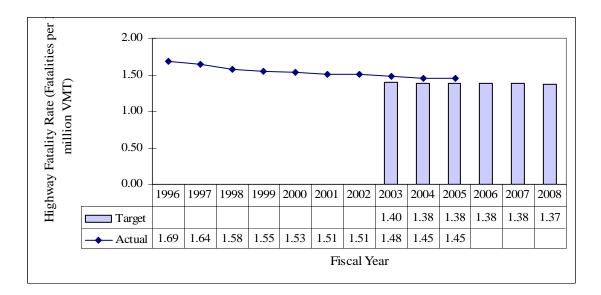


Figure 1. Highway Fatality Rate, 1996 to 2008.

The increase in fatalities comes from the continued dramatic rise in the number of motorcycle fatalities and the increase in pedestrian fatalities over the previous year,

which more than compensate for the slight decrease in motor vehicle occupant fatalities (-0.7%). Motorcycles continue to be of particular concern, playing a large role in the increase with a 13 percent increase in motorcycle fatalities in 2005, to a total of 4,553, an increase of more than 115 percent since 1997. The number of pedestrian fatalities increased from 4,675 in 2004 to 4,881 in 2005, a 4.4 percent increase.

Fatalities often receive more public attention than injuries from traffic crashes; however, the societal toll in hospitalization, medical costs, lost productivity, pain and suffering are a significant burden on individuals and on our society. Like fatalities, injury trends are dominated by highway crashes, accounting for 99 percent of all transportation-related injuries. In 2005, approximately 2.70 million individuals were injured in police-reported motor vehicle crashes, a 3.2 percent decline from the 2.79 million individuals injured in 2004.

Motor vehicle crashes are the leading cause of death and disability for Americans age 4 through 34. Traffic crashes cost our economy approximately \$230.6 billion, or 2.3 percent of the U.S. Gross Domestic Product. This figure includes \$81 billion in lost productivity, \$33 billion in medical expenses, and \$59 billion in property damage. Furthermore, this translates to an annual average of \$820 for every person living in the United States. The average cost for a critically injured survivor of a motor vehicle crash is estimated at \$1.1 million over a lifetime.

The Department has made transportation safety its highest priority. While firmly committed to meeting the 1.0 fatality rate goal, the Department has realized that we will not achieve this goal by FY 2008 as originally planned. To continue making our roads safer, a cross-modal working group has been established to identify new strategies and technologies that will reduce highway fatalities. New performance targets have been established in key areas to focus the Department's efforts on the critical factors responsible for the overall highway fatality rate increase. These key focus areas include passenger vehicle occupants, non-occupants (pedestrians, cyclists, etc.), motorcycle riders, and large trucks and buses. They were chosen in part to cover the breadth of all road users. In addition to the establishment of new performance measures for these focus areas; each mode will continue to maintain their agency-specific intermediate outcome measures, many of which serve as a subset to the Department's accountability measures. The DOT overall fatality rate target for 2008 is 1.37 fatalities per 100 million vehicle miles traveled (VMT).

Reduce the rate of passenger vehicle occupant highway fatalities per 100 million passenger vehicle miles traveled (VMT).

DOT has established a long-term outcome measure: Reduce the passenger vehicle occupant fatality rate (includes passenger cars, pickup trucks, vans, and SUVs) to 1.06 by 2008. The passenger vehicle occupant fatality rate has declined sharply since 1995 when the rate was 1.44. In 2005 (the latest rate data available), the passenger vehicle occupant fatality rate declined to 1.14. The number of passenger vehicle occupant fatalities decreased in 2005 to 31,415 from 31,866 in 2004.

The 2005 Fatality Analysis Reporting System (FARS) data show passenger vehicle occupant fatalities decreased by 1.4%; occupant fatalities in passenger cars declined by 3.9%, while occupant fatalities in light trucks and vans (LTVs) – to include sport utility vehicles (SUVs), vans and pickup trucks) increased by 2.4%. The increase in LTV fatalities was largely impacted by a 3.4 percent increase in occupant fatalities in pick up trucks.

A further reduction in occupant fatalities and the passenger vehicle occupant fatality rate can be achieved by increased availability of front and side airbags, increased seat belt use, a reduction of alcohol and drug impaired driving and increased use of ageappropriate child safety seats. Consequently, DOT has set a 2008 target rate of 1.06 fatalities per 100 million passenger vehicle miles traveled.

Reduce the expected rate of increase in motorcycle rider highway fatalities per 1,000 motorcycle registrations.

While 20 percent of passenger vehicle crashes result in injury or death to occupants, an astounding 80 percent of police-reported motorcycle crashes result in injury or death to involved riders. Motorcycle rider fatalities have increased each year since reaching a historic low of 2,116 fatalities in 1997. In 2005 motorcycle rider fatalities increased to 4,553 (increasing for the 8th year in a row), from 4,028 in 2004. This is a 13 percent increase in just one year and accounts for 10.5 percent of the 43,443 total fatalities in motor vehicle crashes in 2005.

Data from 2005 show that motorcycle rider fatalities increased for every age group; however, the largest increase was in the "50 and over" age group, followed by the "20-29" and the "30-39" age groups. Significant increases again occurred among older riders (40+) who are primarily riding large engine (1,001 cc and above) motorcycles. Increases also continued to occur among younger riders (less than 30) riding medium engine (500-1,000 cc) motorcycles. In addition, speed continued to be a major contributing factor in motorcycle crashes especially among the younger riders. Likewise, the number of motorcycle riders killed in alcohol-related crashes increased by 10 percent.

In 2005, 20 States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, and two other U.S. territories required helmet use by all motorcycle operators and passengers. In another 27 States, only persons under a specific age, usually 18 were required to wear helmets. Three States had no laws requiring helmet use.

According to the Motorcycle Industry Council (MIC), new unit motorcycle sales continued to climb in 2004 (latest data available), rising through the one million mark and reaching levels not seen since the 1970s. MIC data indicates that in 2004, 725,000 new-on-highway motorcycle units were sold, marking the 12th consecutive year of growth for the U.S. motorcycle market. As a result, State operator training programs continue to have difficulty meeting the increased demand for their services.

VMT is usually considered the best measure for exposure since it measures actual miles traveled. However, given that both fatalities and registrations climbed significantly over this period, the lack of change in VMT does not seem credible. Fatality data is collected through FARS and it represents a complete census of all fatal crashes in the U.S. Registration data is collected by the states and provided to the Federal Highway Administration which is responsible for the collection and publication of all exposure data (registration, VMT, licensed drivers). The VMT data collected by the Federal Highway Administration are from estimates gathered by individual states. However, state reporting of motorcycle VMT to FHWA is optional. Even in states that report motorcycle VMT, it is often only measured as a standard proportion of total VMT rather than being collected directly through surveys or roadside counters. FHWA estimates VMT for states that do not report based on data from states that do report. The accuracy of these counts is thus quite speculative. Additionally, motorcycle ridership (i.e. state registration), is itself dependent on high oil prices and successful marketing. For FY 2008, the Department re-baselined this measure to reflect a change of focus from fatalities per 100 million VMT to fatalities per 1,000 registrations.

DOT has set its motorcycle rider fatality rate for FY 2008 at 0.76. Like other road users who are urged to protect themselves from injury or death by wearing seat belts, driving unimpaired, and observing traffic rules, many motorcycle deaths could be prevented if motorcyclists would take responsibility for ensuring they have done everything possible to make the ride safe by taking operator training, wearing protective gear including helmets, and riding sober.

Reduce the rate of non-occupant highway fatalities per 100 million VMT.

According to the 2005 data, the number of non-occupants of all types (pedestrians, pedal cyclists and occupants of motor vehicles not in transport and of non-motor vehicle transport devices) killed in motor vehicle crashes increased by 5.7 percent, to 5,849 fatalities in 2005, as compared to 5,532 in 2004. The increase in the non-occupant fatality rate was impacted most by the 4.4 percent increase in pedestrian fatalities and the 7.8 percent increase in pedalcyclist fatalities. To re-align the non-occupant fatality rate goal with current trends, DOT has re-baselined the measure and has set its FY 2008 target to 0.19 fatalities per 100 million VMT.

Reduce the rate of large truck and bus fatalities per 100 million total vehicle miles traveled.

The new DOT large truck and bus sub-measure will track fatalities involving both occupants and non-occupants in a crash involving a truck with a gross vehicle weight rating of 10,000 pounds or more and/or motor coach) This new measurement will use total VMT, rather than truck VMT. Total VMT captures the traffic volumes of all vehicles, which is important given that approximately three-fourths of fatal large truck crashes in recent years have involved a passenger vehicle. The FY2008 target for large truck and bus fatalities is 0.171.

In addition, the FHWA safety program continues to concentrate efforts on reducing the number of fatalities in three types of crashes: roadway departures, crashes at or near intersections, and collisions involving pedestrians. Approximately 60 percent of the fatalities occurred in roadway departure crashes in 2004; i.e., those involving a single vehicle running-off-road in or a head-on or sideswipe collision with another vehicle. Roadway departures fatalities in 2005 were 25,388, a slight decrease from 2004. Fatalities for intersection-related fatal crashes in 2005 were 9,188 and 4,881 for pedestrian-related fatalities. Both figures represent slight increases from 2004.

While FHWA has adopted several safety-related performance measures, the highway fatality rate measure is shared by the other DOT modal administrations and is included in the Program Assessment and Rating Tool (PART) assessment of the Highway Infrastructure Program.

FHWA safety-related programs and funding continue to yield benefits for communities across the U.S., including improvements in system conditions and operations. Construction programs improve the safety of roadway designs and operations, improve the condition of bridges, and remove roadway hazards. As illustrated in Figure 2, FHWA actively pursues improved highway safety through a comprehensive, multi-faceted approach, which recognizes the role of Engineering, Education, Enforcement, and Emergency medical services (the 4E's) in delivering effective programs and projects.

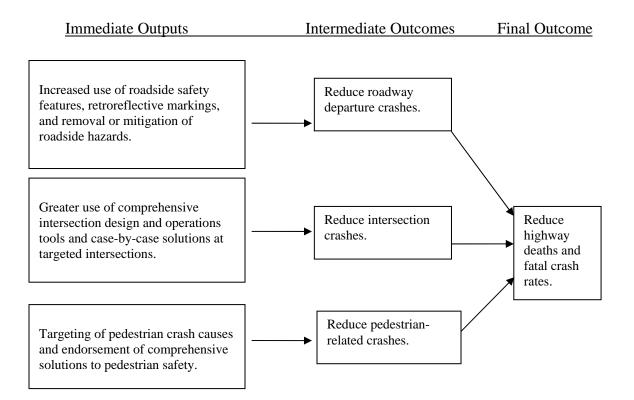


Figure 2. Relationship between Safety-Directed Program Outputs and Outcomes.

As part of its comprehensive safety program, FHWA staff worked closely with state highway engineers and law enforcement officials to identify appropriate engineering safety countermeasures for high-risk locations and new roads. Examples include promoting greater use of roadway improvements such as upgraded guardrails and rumble strips, greater use of retroreflective signage and improved markings, and the removal of roadside hazards.

The FHWA pursues improved intersection safety through a multidisciplinary approach that includes working with industry partners to develop solutions and strategies including: engineering and technology improvements, intersection safety audits, red-light cameras, training for local safety professionals, and increased public awareness. The Intelligent Transportation Systems (ITS) Program continued efforts to develop technology-based systems that could significantly reduce intersection crashes. A major component was the recent construction of an intersection safety test facility at FHWA's Turner Fairbank Highway Research Center and the development of a Cooperative Intersection Collision Avoidance System (CICAS) to help drivers avoid crashes at intersections. The CICAS is one of the Department's priority ITS programs, and it seeks to assist drivers in making safe turns at signalized and unsignalized intersections.

To counter the serious issue of pedestrian fatalities, FHWA continues to actively pursue improved safety through a comprehensive approach. This includes partnering with State and local officials, concerned citizens, local business leaders, schools and youth organizations and incorporates targeting crash causes in major urban areas and select rural locations.

As an integral part of the overall DOT safety program, FHWA continues to work with the National Highway Traffic Safety Administration (NHTSA), the Federal Motor Carrier Safety Administration (FMCSA), the Federal Railroad Administration (FRA) and the Federal Transit Administration (FTA) to develop comprehensive approaches to improve traffic safety.

Management Challenge: Building on Recent Initiatives to Further Strengthen Surface Safety Programs.

To reduce the number and rate of fatalities in traffic-related crashes, the FHWA launched a performance-based approach to safety in FY 2005 that better focuses resources on 16 identified States where the greatest opportunity exists to save lives; these are known as "Opportunity States." As part of this effort, FHWA realigned staff, funding, and program priorities to support a focused approach that concentrates on reducing run-off-the road, intersection, and pedestrian-related fatalities in these States. The Opportunity State designations were retained in FY 2006 and FY 2007.

In addition, FHWA partnered with States to provide support and technical assistance in the development and implementation of safety plans as part of their efforts to advance safety within their States. SAFETEA-LU requires each State to develop a Strategic Highway Safety Plan (SHSP) through a collaborative, comprehensive and data-driven approach. SAFETEA-LU significantly increased funding for Safety goal-related programs beginning in 2006 and established several new or expanded safety programs including the HSIP and SRTS programs. This increase in resources strengthens the ability of States and locals to deliver effective safety programs which lower the overall fatality rate and which save lives.

SAFETEA-LU requires that States develop a comprehensive, data-driven program whose purpose is to reduce fatalities and serious injuries, and to direct Federal-aid highway safety resources toward programs and projects which will have the greatest positive impact within that State. The FHWA does not have the authority to direct the States to address specific safety needs with Federal Aid funds; however States may use funds provided for collection and analysis of safety data, development and implementation of Strategic Highway Safety Plans, and related efforts which maximize the effectiveness of investments in terms of lives saved and injuries prevented. By implementing the focused approach to safety within FHWA and among the States, and with effective implementation of the HSIP and other Safety programs within SAFETEA-LU; the Agency believes the national fatality and crash rates will be significantly reduced.

Anticipated FY 2007 Accomplishments

FHWA plans to continue implementing a focused approach to improving highway safety. Specific topic areas of importance within targeted focus States will be designated for attention, including fatality-producing crashes which involve roadway departure, intersections, and pedestrians; and assistance will be provided to reduce fatalities in these areas. Assistance to States in the development of Strategic Highway Safety Plans will continue. All States are to have developed a SHSP by the end of FY 2007. During FY 2007, the FHWA will continue to focus upon States with higher fatality rates to implement proven measures to enhance safety and assist State and local governments to implement safety programs. These actions will help the FHWA meet the following objectives:

- An increase in the number of States that implement planned countermeasures from roadway departure safety plans, intersection safety improvement plans, and pedestrian safety plans to reduce the number of fatal crashes.
- An increase in the number of States that develop approved high-quality, datadriven, strategic highway safety plans.
- Improvement in the quality of safety data in all States.
- Increase the level of technical assistance and training to implement new programs.
- Use of outreach and marketing materials to facilitate new state and local program implementation.

Progress in these areas should contribute to a downward trend in the national fatality rate, which translates into an increase in lives saved.

Federal Lands Highway (FLH) will implement the Safety Management System (SMS) for the U.S. Fish and Wildlife Service Refuge Road Program. The system will provide valuable safety accident and fatality data that will enable FHWA and its partners to develop targeted strategies to address problem areas. Similarly, FLH anticipates significant progress towards completing a SMS for the Forest Highway Program. The Forest Highway Program is unique in that project delivery decisions are addressed

through a tri-party agreement between FHWA, the U.S. Forest Service and the State departments of transportation. Individual arrangements in 42 states make the collection of safety data challenging, since many of the Forest Highways are owned by multiple jurisdictions. Through a partnership with the National Park Service, the Park Roads and Parkways Program will complete a new Safety Summary Report and gather significant data on crashes in our national parks. In addition, in collaboration with the NPS, a final determination will be made on a future Crash Data System. A pilot Crash Record System for the Indian Reservation Road (IRR) Program will be undertaken to encourage their participation in sharing safety data to support the pilot system. FLH will participate in Road Safety audits planned for various Tribal lands in Arizona, New Mexico, and North Dakota.

FY 2008 Performance Budget Request

Federal-aid Highway Program

Safety funding consists of two basic types of FHWA funding sources: funds dedicated to safety purposes such as the Highway Safety Improvement Program (HSIP), and funds utilized by States to support safety infrastructure and operational improvements as part of Federal-Aid programs such as National Highway System (NHS) and Surface Transportation Program (STP). The Federal-Aid Highway program funds are used by States to improve the safety of roadway designs and operations, improve the condition of bridges, and remove roadway hazards.

FHWA will continue to assist States with the development of Strategic Highway Safety Plans (SHSP) and safety planning where data show a need to improve injury and fatality rates. The Highway Safety Improvement Program (HSIP) will continue to provide States with flexibility to use safety funds for projects on all public roads and publicly owned pedestrian and bicycle paths, and to focus efforts on implementation of a State SHSP. States are required to collect data, analyze highway safety problems and produce a list of projects to be funded based upon the analysis. Data analyses will identify specific countermeasures, which can include installing traffic control devices at high crash locations, establishing roadway departure warning devices including rumble strips, and improving highway signage and pavement marking.

Rural road fatality rates are over three times higher than on the Interstate. To address these higher rural road fatalities, highway safety program funds will provide a foundation for safety improvements in areas where the greatest need exists. The High Risk Rural Road section of the HSIP sets aside \$90 million for FY 2008 to address safety considerations and develop countermeasures to reduce these higher rural road fatalities.

FHWA will also continue to concentrate its efforts in reducing the severity of crashes through roadway infrastructure and operational improvements. Planned activities include funding improvements to the national infrastructure and promoting better geometric design, utilizing more durable pavement markings, installing more visible roadside signs, and increasing skid-resistant roadway surfaces to enhance safety. The continued use of Road Safety Audits assists communities with safety improvements in the construction of new roadways and reconstruction of existing roadways.

An example of how effective roadway safety improvements can be in reducing crashes and fatalities is a cable median barrier program implemented in South Carolina. Cable median barriers were installed on the Interstate system in an effort to reduce the potential for median crossover crashes. Multiple sources of funds, including Federal aid funding, were used for these improvements. The cable median barrier reduced the number of annual fatal Interstate median crossover crashes by 67 percent, from before installation in 2000, through 2003.

Pedestrian safety programs and intersection improvement plans will also be addressed through the HSIP program. An example of a pedestrian project that was implemented in Montgomery County, Maryland, involved the development of new design standards for sidewalks and bike paths on residential and collector roads. The new standards support safe passage for motorists, pedestrians, bicyclists and address issues such as increasing the clear zones on higher speed collector roads and aligning the dimensions of slope of shoulders, ditches and driveways to provide pedestrian facilities in accordance with the American with Disabilities Act. In addition to pedestrian-oriented projects supported by the HSIP, the new Safe Routes to School (SRTS) program empowers communities to make walking and bicycling to school a safe and routine activity. The program supports a wide variety of programs and projects, from safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.

In one area to address intersection safety, FHWA will work with the Federal Railroad Administration and the Federal Transit Administration to further reduce the number of incidents at public highway-rail grade crossings. The number of crashes at crossings has been reduced by 75 percent since 1975 with the installation of lights and gates, signing and roadway geometric improvements. In FY 2008, \$220 million is set aside to address crossing safety countermeasures. An example of an intersection safety project involved the redesign of a traffic circle in Colonie, New York, incorporating improved safety features. The circle was constructed in 1934 and formed an interchange between two busy state highways. A frequent accident site, the circle was improved with new approach signs and pavement markings to minimize driver confusion. The approaches were redesigned with new curbs, aprons and signage. Wet/night reflective markings were used to maximize the effectiveness even under adverse weather conditions. These safety improvements enhanced the ability of drivers to safely move through the traffic circle.

Federal Lands Highway

Federal Lands Highway will advance its safety initiatives to the next level. For programs that are completing the development of data systems such as the Refuge Road and Parks Roads and Parkways Programs, FLH will execute safety strategies based on the safety data and deploy strategies to strengthen our approach for planning, designing, and constructing roads and bridges in our parks and refuges. For programs in the final stages of completing an SMS, such as the Forest Highway and IRR programs, FLH will be focusing on effectively gathering data to support the requirements of the new systems. Generally, the goal is to move from the tool development stage to the development and deployment of corrective actions phase based on what the safety data is telling us. The outcomes should be a safer visitor experience at parks, refuges and forests and safer travel for tribal members who use IRR facilities daily.

Research and ITS

Four critical crash areas will continue to be addressed in FY 2008: roadway departure crashes, intersection fatalities, pedestrian fatalities, and establishment of a strategic approach to improving highway safety. To address roadway departure crashes, research funds will support activities that include the refinement and implementation of the Interactive Highway Safety Design Model (IHSDM), efforts to enhance roadway and roadside visibility, and activities to improve the crashworthiness of road and roadside safety features. Outreach activities, including training courses, implementation materials, and demonstration and evaluation of technologies, will be critical components of this program.

To reduce intersection fatalities, research funds will support identification and evaluation of innovative infrastructure and operational configurations at both signalized and non-signalized intersections. Examples of such designs are a Diverging Diamond and Continuous Flow Intersections. Road safety audit training and promotion of intersection safety analysis tools will be critical components of this program area. ITS technologies such as ITS based intersection crash avoidance systems will be developed and tested. In cooperation with the automobile industry, work will also continue to develop integrated vehicle based safety systems and to pursue vehicle to vehicle and vehicle to roadside communications.

In addition, the FHWA will conduct numerous safety research projects that contribute to multiple objectives. These include work on speed management in evaluating variable speed limits and further analysis of rational speed limits; safety management in commercialization of the Digital Highway Measurement Vehicle; deploying the first version of the Safety Analyst software/starting the development of the next version of Safety Analyst; evaluating the effectiveness of various safety improvements; developing and operating the fifth generation of the Highway Safety Information System; advanced visibility technologies; and work on human-centered systems to incorporate human factors considerations into all aspects of highway design.

To address the problem of pedestrian fatalities, research and ITS funds will enable FHWA to continue to work in cooperation with the NHTSA on developing and evaluating comprehensive countermeasures and appropriate tools and technologies to improve pedestrian safety; integrating pedestrian issues in the planning, design, operations, and maintenance of roadway facilities; and implementing key recommendations from our partners and customers. New initiatives for FY 2008 include evaluation of the impacts of traffic calming designs and development of expert systems to evaluate pedestrian and bicycle improvements opportunities.

Research funds will also be used to develop, demonstrate, and implement techniques for States to collect better safety data; to use the information appropriately to support Strategic Highway Safety Plans; and to evaluate the success of safety programs. This will ensure that resources are allocated so as to provide maximum returns in reducing the severity and frequency of crashes. Results from the FHWA-managed Evaluation of Safety Countermeasures Pooled Fund Study will also be advanced and reported on. Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows:

692 FTE and \$89.3 million

The Safety strategic initiative is supported by information technology through a number of mission support and management data systems utilized by staff in delivering the program:

Fatality Analysis Reporting System (FARS): FARS, which is managed by the National Highway Traffic Safety Administration, is the primary database for Federal level highway safety analysis. It contains data on all fatalities on public roads within the 50 States, DC and Puerto Rico; and is used by USDOT staff to analyze trends and characteristics of fatality-producing crashes.

Highway Performance Monitoring System (HPMS): The HPMS is a national level highway information system that includes data on the extent, condition, performance, use, and operating characteristics of the Nation's highways. In general, the HPMS contains administrative and extent of system information on all public roads, while information on other characteristics is represented in HPMS as a mix of universe and sample data for arterial and collector functional systems. VMT data from the HPMS are used to determine the highway fatality rate.

FHWA uses HEPGIS Software and GIS expertise to support the Safety, Mobility, Global Connectivity, Environment, Organizational Excellence and Security strategic initiatives though the analysis and display of information. The primary function of HEPGIS is the display of data that is the official record of the National Highway System (NHS), NHS connectors, Strategic Highway System (STRAHNET), STRAHNET connectors and the Interstate. The output of GIS is used to analysis the transportation system, share information with other agencies and define which roads are eligible for Funds. GIS is also used to make this information available over the Internet.

Responsible Official: Mr. Jeffrey Lindley, Associate Administrator for Safety

REDUCED CONGESTION

DOT Performance Goal: Reduction in urban congestion.

This funding request contributes to the DOT Reduced Congestion strategic objective and the performance outcome goals to achieve a reduction in urban congestion.

 Percent of total annual urban-area road travel time that occurring in congested conditions.

 Target:
 $2002 \\ 30.9$ $2003 \\ 31.6$ $2004 \\ 32.3$ $2005 \\ 33.0$ $2007 \\ 2007 \\ 2008 \\ 33.7$ $2008 \\ 32.5$ 32.3

 Actual:
 30.7(r) 31.0(r) 31.6(r) 31.8# 32.6#

(r) Revised; * Preliminary; # Projection

Funding for this performance goal: \$6.6 billion.

This request will allow FHWA to fund transportation-related improvements that address traffic congestion in urban areas and will support the Department's Congestion Initiative. The Nation's transportation system can be improved by advancing a variable pricing program that increases throughput. Funds will be used to improve the performance of our existing transportation system through operational and management improvements, and by increasing physical capacity. Operation and management strategies to improve performance of the existing transportation system include: travel demand management practices (to include variable pricing of facilities); implementing infrastructure- and operational-oriented strategies to mitigate traffic bottlenecks; improving management of freeway and arterial systems; and enhancing decision-making through the use of more robust traffic analysis tools, the integration of system management and operation considerations into the Planning process; and the establishment of partnerships that include all of the key agencies in a region.

Also, FHWA will continue developing the next generation of system operations capabilities that improve real-time information collection and dissemination to enable State and local transportation agencies to better quantify performance, better utilize reductions in congestion management techniques, and place better information in the hands of transportation decision-makers. In addition, funds will be used to improve the performance of the existing transportation system and increase physical capacity. The capacity and performance of the physical infrastructure can be increased in specific locations or corridors by building new facilities, adding lanes to existing facilities, or removing bottlenecks.

The resources requested to achieve this goal are:

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES	-	FY 2006 . <u>CTUAL</u>	со	FY 2007 NTINUING SOLUTION	1	FY 2007 PRESIDENT'S <u>BUDGET</u>	Ē	TOTAL 2008 REQUEST
II. Reduced Congestion								
A. Reduction in urban congestion								
Federal-aid Highways (Excludes LAE)	\$	5,833,758	\$	5,220,226	\$	6,473,435	\$	6,547,598
Transp. Infrastructure Finance and Innov. Act (TIFIA)		17,968		17,018		20,211		20,856
Surface Transportation Program		790,795		710,837		954,616		999,989
National Highway System		832,149		698,221		937,708		982,279
Interstate Maintenance		840,245		705,165		947,058		992,076
Bridge Program		620,881		521,105		699,869		733,137
Congestion Mitigation & Air Quality Improvement								
Highway Safety Improvement Program								
Equity Bonus		966,680		996,068		1,163,498		1,356,485
Equity Bonus (Exempt)		105,627		105,627		105,627		105,627
Federal Lands Highways		115,948		105,087		142,364		150,171
Appalachian Development Highway System		78,861		67,055		89,171		89,291
High Priority Projects		436,898		364,062		491,417		483,049
Projects of National and Regional Significance		64,630		67,320		90,869		89,322
ITS Research		11,395		11,395		12,817		12,598
Transportation Research, Training and Education		59,511		65,819		66,938		65,798
Miscellaneous Programs		875,640		768,917		734,742		450,390
Emergency Relief Program		16,530		16,530		16,530		16,530
Congestion Initiative Value Pricing Program								[\$100,000]
Appalachian Development Highway Systems (ADHS)		3,273		13,609				
Emergency Relief Supplemental (GF)		983,924						
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	6,820,955	\$	5,233,835	\$	6,473,435	\$	6,547,598
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	64,741		59,312	\$	61,126	\$	63,043
TOTAL REQUEST	. \$	6,885,696	\$	5,293,147	\$	6,534,561	\$	6,610,641
FTE (GOE & Federal-aid Direct)		496		454		494		488

Performance Issue

Traffic congestion on the Nation's highways has steadily increased over the past 20 years as population, number of drivers and vehicles, and travel volume continue to increase at a much faster rate than system capacity. According to the Texas Transportation Institute, drivers experience 3.7 billion hours of delay and waste 2.3 billion gallons of fuel annually due to traffic congestion. The economic impact of congestion, including wasted fuel and time, was estimated to be over \$63 billion in 2003. Over 60 percent of the cost was experienced in the 10 metropolitan areas with the most congestion. In addition, many of the major urban centers in the U.S., such as Los Angeles/Long Beach CA, are significant freight hubs. The volume of freight that moves through these urban centers is predicted to continue to grow. Freight movement affects traffic congestion levels and is impacted by congestion in urban centers.

The DOT and FHWA adopted the percent of daily-congested travel nationwide as an indicator of overall system performance. The measure is an estimate of the percent of daily traffic in approximately 400 urbanized areas moving at less than free-flow speeds. The FHWA includes this long-term congestion measure within the FAHP PART assessment. As noted in figure 3, the percent of congested travel was 31.8 percent in 2005, a figure below the projected level of 33.2 percent (and the target of 33.0 percent). The actual result was 0.2 percent higher than in 2004, a rate slightly below the projected increase of 0.7 percent. On the whole, recent results suggest that the overall rate of growth in traffic congestion nationwide has slowed somewhat. The goal in FY 2008 is to reduce the level of congestion by 0.2 percent relative to the FY 2007 target level.

In addition, the rate of growth in traffic congestion nationwide appears to be slowing based on the analyses of real-time traffic data that the FHWA collected during 2004-2005 from travel information websites and transportation management centers in selected cities. Upcoming analysis of 2006 data from transportation management centers in 20 cities will provide more detailed information on congestion growth rate trends during 2005-2006.

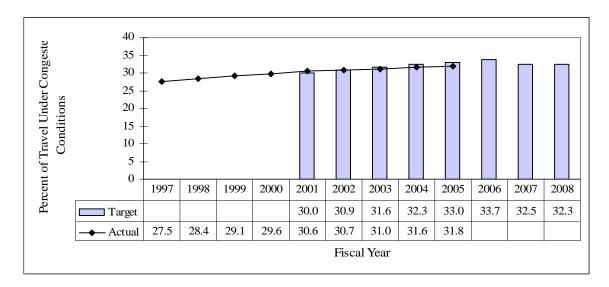


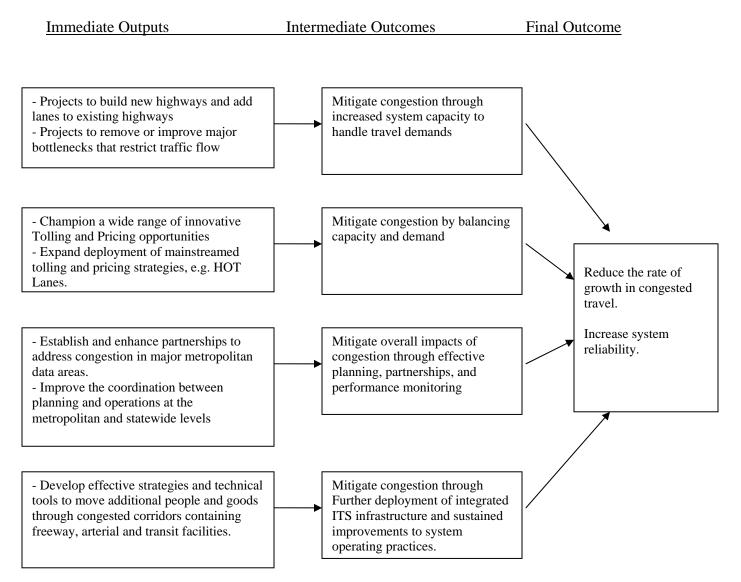
Figure 3. Percent of Travel under Congested Conditions, 1997-2008.

Innovative strategies to reduce congestion are now available. For example, new advances in technology can greatly improve system operations and management and provide for the application of pricing. In addition successful congestion reducing demonstrations in major cities around the world have proven that congestion pricing strategies are effective. Furthermore, a number of freeway and arterial management strategies are available to address recurring congestion. For example, poorly timed traffic signals cause approximately 10 percent of congestion. Often signals are initially timed, but not readjusted when traffic patterns changes. This results in inefficiency and unnecessary delays. Effective and low-cost options are currently available to address this problem.

As illustrated in Figure 4, the FHWA will pursue several broad strategies that are aimed at reducing congestion in urban areas. A high priority will be placed on establishing Urban Partnership Agreements where model cities commit to implement a broad congestion pricing or variable toll demonstration; create or expand express bus services; secure agreements from major area employers to establish or expand telecommuting and flex scheduling programs; and complete significant highway capacity projects that have high potential for reducing congestion and bottlenecks. A significant body of knowledge will be developed to support the Agreements and to extend the resulting successes to the broader community. Effort will also focus on developing and promoting improved freeway and arterial management strategies. In addition, improved decision-making frameworks and practices that encompass all relevant information points (e.g., system

management and operations) will be developed and supported through to institutionalization in the planning process.

Figure 4. Relationship between Urban Congestion Reduction Program Outputs and Outcomes.



Increasing the capacity of the highway infrastructure is also an important approach to reducing traffic congestion. The capacity of the physical infrastructure can be increased in specific locations or corridors by building new facilities, adding lanes to existing facilities, or removing bottlenecks. In addition, FHWA will implement SAFETEA-LU programs to fund designated projects that will add capacity to the National Highway System. The Projects of National and Regional Significance Program involves 25 projects and \$1.779 billion in funding over five years. The National Corridor Infrastructure Improvement Program involves 33 projects and \$1.948 billion in funding over 5 years.

To advance the opportunity for public private financing, FHWA will provide technical assistance and share information with other government partners so that they can assist legislators at all government levels to develop enabling legislation that would permit public-private financing arrangements for select projects, thus leveraging public funds to increase investment in tolling and pricing demonstration projects and capacity expansion projects. FHWA will also consider the use of credit assistance through the Transportation Infrastructure Finance and Innovation Act (TIFIA) credit program, if proposed projects meet the established criteria. The TIFIA program was the subject of a Program Assessment Review (PART) during the FY 2008 budget cycle and is discussed in Section 3.

Anticipated FY 2007 Accomplishments

Congestion reduction should be achieved in areas where there are higher levels of investment in adding system capacity and removing bottlenecks, more emphasis on effective congestion partnerships that promote tolling and pricing strategies, collection and dissemination of real-time information, and other effective operational practices. By focusing efforts on these areas, FHWA anticipates progress in meeting the following objectives:

- Aggressively advance tolling and pricing strategies by assisting practitioners in States and Metropolitan areas that are most apt to implement tolling and pricing projects, and increase the overall understanding of such strategies in the broad transportation community as well as among elected officials and other key decision-makers. In addition, FHWA will work to improve the analysis technical capabilities required to analyze and evaluate tolling and pricing programs within the context of ongoing Statewide and regional transportation planning program options.
- Implement a major program to encourage the conversion of HOV lanes to HOT lanes by assisting States in the analysis of the operational characteristics of their HOV facilities to determine if such conversions are warranted and providing deployment assistance if necessary.
- Implement a major program to encourage the conversion of HOV lanes to HOT lanes by assisting States in the analysis of the operational characteristics of their HOV facilities to determine if such conversions are warranted and providing deployment assistance if necessary.
- Implement a comprehensive National strategy to reduce traffic bottlenecks through developing and providing, to transportation agencies, information and technical assistance to improve system operations that will mitigate or eliminate bottlenecks.
- The integration of operations and management considerations into the Planning process will be fundamentally improved through the issuance of new guidance on the revised requirements for Congestion Management Process and the Long-Range Transportation Plan. This guidance will be supported through a variety of outreach and technical assistance strategies.

- Increase the number of States using non-traditional revenue sources beyond TIFIA and State Infrastructure Banks for project financing.
- Increase the number of State and local transportation agencies using transportation operations performance measures to monitor performance, determine appropriate system enhancements, and support the consideration of investment in potential improvements by decision-makers.
- Improve the management of arterial transportation systems through the implementation of improved traffic signal timing. Specifically, National awareness of the contribution of improved traffic signal timing to congestion reduction will be raised via a National Traffic Signal Timing Report Card. In addition, specific technologies to enhance traffic signal timing will be advanced through promotion of specific techniques and products, such as ACS-Lite, and the provision of technical assistance.
- Promote the use of real-time data to better quantify performance, better utilize congestion management techniques, and place better information in the hands of people making transportation decisions.
- Provide technical assistance to the Federal Land Management Agencies (FLMA) to develop long-range transportation plans for FLMA regions or units that effectively integrate alternative transportation systems, intelligent transportation systems and the use of management systems into decision-making.
- Participate with the Federal Transit Administration (FTA), the U.S. Department of Interior, and the U.S. Department of Agriculture in analyzing the applicability and feasibility of the use of alternative transportation systems in highly congested areas on Federal lands for projects that would be funded under the Alternative Transportation in Parks and Public Lands program.
- Provide technical assistance to the FLMAs, including the National Park Service, U.S. Fish and Wildlife Service, and the U.S. Forest Service, in the development of congestion management systems for the FLHP programs. Provide technical assistance to the Bureau of Indian Affairs to develop criteria for determining when congestion management systems are required.

FY 2008 Performance Budget Request

Federal-aid Highway Program

Value Pricing Pilot Program: \$100 million

In support of the Department's Congestion Initiative, the budget proposes to reprogram \$100 million from unobligated balances of inactive highway demonstration and other projects for the Value Pricing Pilot Program. The \$100 million would be in addition to the \$12 million authorized in SAFETEA-LU for the Value Pricing Pilot Program in FY 2008, bringing the total program to \$112 million. This infusion of funds would allow FHWA to accelerate progress in advancing the Urban Partnership Agreement track of the Congestion Initiative, which aims to implement

pricing programs in selected metropolitan areas. Specifically, the funding would be used to assist selected States in constituency building, outreach, program development, implementation and/or evaluation related to charging for the use of portions of their highway systems so as to better manage demand and enhance system performance.

Highway funds apportioned to the States will continue to be used to increase roadway throughput by adding system capacity, either as new roadways or transit routes, added traffic lanes, or additional buses in specific locations where congestion is recurring. States and local governments will also use these funds to improve traffic flow through more effective systems management and operations, including variable pricing programs, providing better information to travelers to allow them to choose departure times, travel modes, and routes that may mitigate congestion problems. The capacity of the physical infrastructure can be increased in specific locations or corridors by building new facilities, adding lanes to existing facilities, or removing bottlenecks.

In the following paragraphs, two major projects are described which illustrate how the uses of FAH funds contribute to reducing congestion:

- <u>The I-10/Katy Freeway, Texas</u> project is estimated at over \$2.7 billion and consists of reconstruction and widening of 23 miles of I-10 to provide general purpose through lanes, frontage road lanes in each direction, and managed lanes. This major project will provide transportation infrastructure to serve future development patterns. Population growth is projected to result in a corridor population increase of 42 percent between 1990 and 2020. However, some portions of the corridor are projected to grow by as much as 130 percent for the same time period. For the same period, employment growth is projected to be equally as strong within the corridor, with average growth in employment in excess of 44 percent. These growth projections point to major increases in travel demand along the Katy Freeway corridor.
- <u>The I-43/I-94/I-794 Marquette Interchange, Wisconsin</u> project is estimated at over \$800 million and consists of the reconstruction of the Interstate 94/794/43 interchange in Milwaukee. The interchange accommodates Milwaukee's commuter traffic, as well as interurban traffic traveling to and from Madison, Green Bay, and Chicago, and long-distance interstate traffic. The existing interchange was built in 1968. The reconstruction will address structural deterioration and operational and safety concerns, including the location of exit and entry ramps, alignments that fail to meet current AASHTO policy, substandard sight distances, and narrow or absent shoulders.

In FY 2008, FHWA will provide technical assistance to all parties involved in Public Private Partnerships (PPP) issues from both a programmatic and project level. The PPP program will be reaching out to state representatives, state DOTs, private sector interests, and private financial community representatives to explain and demonstrate how financing tools and PPP methods have worked successfully to build roads and highways faster and more economically. FHWA will share information with state government and private industry and financial representatives about the advantages of using innovative partnerships by developing and disseminating PPP technical materials. Program staff will prepare a revised technical manual, which will be of value to those who will be interested in using PPPs to more easily accomplish their objectives. Staff will also be presenting PPP best practices and highlighting successful examples of PPPs used throughout the country at meetings and conferences during the year. FHWA will assist in the implementation of the Secretary's Congestion Initiative by encouraging states to enact PPP enabling legislation, working with states and others to overcome institutional resistance by explaining how the process works and what was done to achieve success, and identifying and utilizing Federal program authorities to encourage the formation of PPPs.

Federal Lands Highway

FLH will use identified funding to reduce congestion by continuing to implement alternative transportation solutions on all Federal lands. FLHP funds will be used to support capacity expansion, including the use of buses in national parks, national forests, fish and wildlife refuges, and Indian Reservations, as well as operational improvement approaches. FHWA is coordinating a joint effort with the Department of Interior to create a process for external reviews of the Park Road and Parkways Program. These activities are referred to in the PART assessment of the Federal Lands Highway Program.

Research and ITS

Global Positioning System Civil Requirements: \$3.6 M

The Secretary of Transportation proposes to provide resources to the Secretary of Defense for assessment, development, acquisition, implementation, operation, and sustaining of additional designated Global Positioning System civil capabilities beyond the second and third civil signals already contained in the current Global Positioning System Program. FHWA requests the reprogramming of \$3.6 million of unobligated balances of highway funds to be used to develop the new GPS L1C civil signal (modernized signal compatible with the EU Galileo Open Service signal on the new GPS III satellites), and for GPS Civil Signal Monitoring that entails software and hardware upgrades for global monitoring of all civil signals to include L1C/A, L2C, L5, and L1C.

Effectively addressing traffic congestion will hinge on the ability of FHWA and State and local transportation agencies to transform traditional transportation organizations into modern agencies using advanced technologies to improve management and operations. ITS technologies have been researched, deployed, and tested during the past decade to improve the operation of the highway system and mitigate congestion.

Specifically, FHWA will use FY 2008 R&D and ITS funding to:

• Promote the findings gathered from the Urban Partnership Model City experience by fully engaging its field staff in promoting broad-based (e.g., managed lane networks) and individual facility-based (e.g., converting HOV to HOT lanes) congestion pricing or variable toll practices, facilitating the creation or expansion of express bus services, and encouraging a variety of non-facility travel demand strategies such as telecommuting and flex scheduling programs.

- Specific strategies to improve freeway and arterial management practices will be promoted. For example, FHWA will continue its efforts to increase the number of jurisdictions with current traffic signal timing practices through aggressive outreach and technical assistance.
- Continue to promote improved decision-making practices in transportation planning through the development of model practices and outreach materials, and the application of innovative technical transfer techniques.
- Continue to support and promote the development and adoption of performance measures. Move to institutionalize the use of performance measures by promoting and facilitating their integration into the Congestion Management Process.
- Initiate a major field test of vehicle to roadside communication to fully develop the mobility and safety applications, including enhancing analyses of probe data from vehicles, integration of probe data with traditional transportation network data and third party information service providers, and specific tailoring of invehicle and roadside data processes.
- Continue to work with States to deploy operational and planning countermeasures to address identified bottlenecks and chokepoints, focusing on the implementation of outreach strategies that capitalize on successful actions implemented in FY 2007.

<u>DOT Performance Goal</u>: Increased use of integrated ITS networks and new incident management approaches.

This funding request contributes to the DOT Reduced Congestion strategic objective and the performance outcome goal to increase use of integrated ITS networks and new incident management approaches.

Percent of U.S. population with access to 511 travel telephone service.									
Target:	<u>2002</u> N/T	<u>2003</u> 30%	<u>2004</u> 35%	<u>2005</u> 40%.	<u>2006</u> 50%	<u>2007</u> 65%	<u>2008</u> 75%		
Actual:	14%	17%	25%	28%	35%				
1	Percent of top 40 metropolitan areas with full service patrols, quick clearance policies, and quick clearance laws.								
Target:	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
Establish baselines for each measure in FY 2007.									

Funding for this performance goal: \$3.4 billion.

This request will allow FHWA to fund efforts aimed at minimizing the impact of events that occasion non-recurring congestion, to include traffic incidents, construction (work) zones, and weather. Activities will proceed along two tracks: (1) Providing travelers with the information they require to make better decisions about the routes to take, the times to travel, and mode to use, and (2) Mitigating the negative mobility impacts associated with traffic incidents, work zones, and weather. With respect to the first track, the requested funds will allow FHWA to pursue the next generation of ITS-based system operations capabilities that improve the collection of real-time information and its dissemination to the traveling public and operating agencies. Also the requested funds will support technological improvements aimed at developing and implementing integrated approaches to corridor management where travelers will receive, in real-time, information on the status of alternate modes in a given corridor. The second track targets transportation-related improvements that address expanding the application of effective incident, construction (work) zone, and road weather management approaches. Funds will be used to advance incident management approaches that more rapidly clear incidents from the roadway, and encourage the planning for, establishing, and managing of work zones in ways that consider the broader safety and mobility impacts of work zones across all stages of a project. Because traffic incidents account for roughly onequarter of congestion, a high-priority emphasis area aimed at increasing the deployment of full-service (incident-oriented) patrols, and Quick Clearance policies and laws has been identified. In addition, funds will provide for ITS-based solutions to improving road weather management.

TOTAL FY 2007 FY 2007 STRATEGIC & PERFORMANCE GOALS EV 2006 CONTINUING PRESIDENT'S 2008 by PROGRAM ACTIVITIES ACTUAL **RESOLUTION** BUDGET REQUEST II. Reduced Congestion (continued) B. Increased use of integrated ITS networks and new incident management approaches Federal-aid Highways (Excludes LAE) 2,968,053 \$ 2,655,905 \$ 3,293,502 \$ 3,331,236 Transp. Infrastructure Finance and Innov. Act (TIFIA) 9.142 8.659 10.283 10.611 Surface Transportation Program 402 334 361.654 485.682 508.767 National Highway System 423,374 355,235 477,079 499,756 Interstate Maintenance 427,493 358 768 481.837 504 740 Bridge Program 315,887 265,124 356,074 373,000 Congestion Mitigation & Air Quality Improvement -----Highway Safety Improvement Program Equity Bonus 491,819 506,772 591,955 690,142 Equity Bonus (Exempt) 53,740 53,740 53,740 53,740 72,431 Federal Lands Highways 53,465 76,403 58,991 Appalachian Development Highway System 45 367 45.429 40.123 34.116 222,282 185,225 250,019 245,762 High Priority Projects Projects of National and Regional Significance 32.882 34.250 46.232 45.444 5,797 6,521 6,410 ITS Research 5,797 Transportation Research, Training and Education 30,278 33,487 34.056 33,476 373.816 229,146 Miscellaneous Programs 445,501 391,203 Emergency Relief Program 8,410 8,410 8,410 8,410 Congestion Initiative -- Real-time System Mgmt Info Program & Research [\$50,000] Appalachian Development Highway Systems (ADHS) 1,665 6,924 Emergency Relief Supplemental (GF) 500,593 PROGRAM FUND: SUBTOTAL PROGRAM FUND 3,470,311 2.662.829 3.293.502 \$ 3.331.236 \$ \$ LIMITATION ON ADMINISTRATIVE EXPENSES \$ 32,938 30,176 \$ 31,099 S 32,075 TOTAL REQUEST 3,503,249 \$ 2,693,005 \$ 3,324,601 \$ 3,363,311 FTE (GOE & Federal-aid Direct) 252 231 251 248

The resources requested to achieve this goal are:

(\$000)

Performance Issue

Non-recurring congestion accounts for half of all congestion. This is the congestion that comes as a surprise. The four main causes of non-recurring congestion are: traffic incidents (ranging from disable vehicles to major crashes), work zones, weather, and special events. Non-recurring events dramatically reduce the available capacity and reliability of the entire transportation system. Travelers and shippers are especially sensitive to the unanticipated disruptions due to tightly scheduled personal activities and manufacturing distribution procedures.

Traffic incidents cause approximately 25 percent of traffic congestion. For every minute that an incident blocks a lane, it increases congestion of an additional 4 minutes after the incident is cleared. Better incident management practices can have a profound effect on the system by improving traffic safety and reducing non-recurring congestion. According to the 2004 Urban Mobility Report, good traffic incident management practices led by quick clearance actions can reduce delay by 170 million hours annually. However, there remain many obstacles to the effective and uniform application of Quick Clearance and

Move It policies. This is because traffic incident management is neither solely a public safety function nor solely a traffic management function. It requires cooperation between various public agencies to reach full efficacy in clearing traffic incidents and containing the amount of resulting traffic congestion. Promoting effective partnerships for quick clearance strategies are key to the effective management of traffic incidents.

Over 3,000 work zones were present on the National Highway System during the 2001 summer season – this translated to over 60 million vehicles per hour per day of lost capacity. Because much of the Interstate System is over 30 years old, this trend will continue. Work zones on freeways account for nearly one-quarter of non-recurring delay. The new Work Zone Safety and Mobility Rule is intended to tackle this issue, while at the same time promoting work zone safety. The Rule advocates stronger consideration and management of work zone safety and mobility impacts. It focuses on state and local agency-level work zone impacts throughout the project delivery process. Compliance with the updated rule is required by October 12, 2007. The rule provides considerable opportunity to improve the management and implementation of work zones so as to reduce associated congestion impacts.

Weather related incidents constitute 15 percent of the time loss attributed to congestion. Improving the accuracy and timeliness of road weather information made available to road users and operators, and building the road weather observational database that supports the development of such information is key to helping to resolve this component of the congestion problem.

While traffic incidents, work zones, and weather related delays may be productively addressed through individual programs, efforts aimed at providing real-time information about the resulting delays and better managing the associated traffic patterns, also provides opportunities to significantly reduce congestion. Real time travel information is "decision-quality" information about traffic incidents, the weather, construction activities, transit and special events allows travelers to choose the most efficient mode and route to their final destination. Such information may be provided through dynamic message signs, 511 services, in-vehicle devices, and Web sites.

FHWA continues to support and track the deployment of 511, a national travel information telephone service that provides drivers with easier access to local travel conditions information. As illustrated in Figure 5, the 511 Telephone service is now accessible to about 35 percent of the Nation's population. The target is to make the service available to 75 percent by the end of FY 2008.

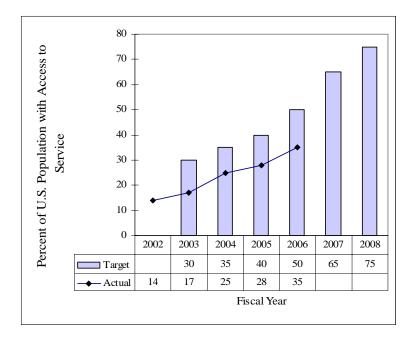


Figure 5. Percent of Population with Access to 511 Telephone Traveler Information Services, 2002-2008.

Working through the National Traffic Incident Management Coalition, which is comprised of a number of transportation, public safety and private sector organizations, FHWA initiated an effort this past year to develop measures that will be used to monitor progress in changing the state of practice in three areas: Full-function service patrols, Quick Clearance or Move It laws, and Quick Clearance policies. It is anticipated that the measures will be defined and baseline performance trends available by the end of 2007. There are a number of technical challenges associated with developing measures that can be used in all jurisdictions, not the least of which is achieving a consensus on operational definitions for each measure and agreement on the methodologies used to collect and report the data nationwide.

Complementing this information is the management of integrated corridors. Unused corridor capacity often exists on parallel routes, on the non-peak direction on freeways and arteries, within single-occupant vehicles, and in transit vehicles. As traffic congestion increases due to non-recurrent congestion events, shifts in travel demand to unused capacity can be accomplished by delivering real time travel data. ITS technologies can efficiently and proactively manage the movement of people and goods in major transportation corridors in large cities.

As illustrated in Figure 6, FHWA will pursue broad strategies that are aimed at increasing the use of integrated ITS networks, providing real-time traveler information, effective approaches to incident and construction (work) zone management as well as road weather management technologies. A high priority will be placed on integrated corridor management, reducing incident delay, and better managing work zones associated with construction and maintenance projects.

Figure 6. Relationship between Integrated ITS networks and Incident Management Program Outputs and Outcomes.

Immediate Outputs	Intermediate Outcomes	Final Outcome
 Complete development and foster use of regional ITS architectures Continue to pursue implementation of integrated ITS technologies and services in large metropolitan areas. 	Mitigate congestion through Further deployment of integrated ITS infrastructure and sustained improvements to system operating practices.	
 Working with State and local partners, develop and implement actions to aggressively work on closing identified program gaps in traffic incident and work zone management. Pursue development of incident delay measures and performance targets in major metropolitan areas. 	Reduce non-recurring congestion from events such as traffic incidents and work	Reduce congested travel. Increase system reliability.
Encourage real-time monitoring of travel conditions - Champion 511 deployments - Champion use of travel time messages to motorists via DMS, etc. Work cooperatively with the private sector	Mitigate congestion by providing the public with easier access to better information so that they can make better	→

Anticipated FY 2007 Accomplishments

Congestion reduction should be achieved in corridors and areas where there are more extensive deployment and integration of ITS technologies, and greater use of work zone, incident management practices, and other effective operational practices. By focusing efforts on these areas, FHWA anticipates progress in meeting the following objectives:

- Developing effective strategies and technical tools to move additional people and goods through congested corridors in major metropolitan areas that consist of freeway, arterial, and transit facilities, particularly by advancing the Joint Program Office ITS Integrated Corridor Management Initiative.
- Increasing the number of jurisdictions with Quick Clearance Best Practices procedures and full function service patrols by mobilizing FHWA field staff to promote such laws, policies and practices and adequately equipping them to provide technical assistance.

- Continuing efforts to ensure the necessary collaboration and coordination between the transportation, public safety, and private sector communities as required for effective traffic incident management.
- Championing the implementation of integrated communication between traffic management centers and other transportation assets and emergency call-taking/dispatch centers and other appropriate public safety responder agencies. In particular, partner with the ITS JPO to work with States involved in Traffic Management Center (TMC)/Computer-Aided Dispatch (CAD) Integration Field Operational Test to apply lessons learned and software modules developed to other States using same or similar TMC systems.
- Providing focused, on-site technical assistance to State DOT's to improve work zone management.
- Continuing to provide guidance and technical support to States implementing the requirements of the updated Work Zone Rule particularly through regional workshops and various peer exchange opportunities.
- Championing the deployment of 511 Services and use of travel times on Dynamic Message Signs (DMS) through executive-level outreach and promotion aimed at key, high-impact locations. The portion of the Nation's population with access to 511 traveler information services should increase to 65 percent in 2007.
- Establishing and supporting the SAFETEA-LU Section 1201 Real Time System Management Information Program and deployment of its requirements. Developing program guidance and providing technical assistance and peer assistance for implementing the program, including development of data exchange formats.
- Implementing a Congestion Management Innovation Demonstration Program to provide the private sector an opportunity to show what capabilities they have that can also support both the Section 1201 SAFETEA-LU requirements and 511/travel times on DMS.
- Demonstrating regional weather observation networks and establishing a national partnership to deploy and operate a national weather observation network.

FY 2008 Performance Budget Request

Federal-aid Highway Program

Real-time System Management Information Program: \$25 million

In support of the Department's Congestion Initiative, the budget proposes to reprogram \$25 million from unobligated balances of inactive highway demonstration projects for the Real-time System Management Information Program. Funding to support the Real-time System Management Information Program (section 1201 of SAFETEA-LU) will be provided to State and local transportation agencies to plan or implement monitoring services collecting information relative to the program. Activities will include: analyzing and revising regional ITS architectures to accommodate program requirements; planning and developing projects for acquiring monitoring services or integrating information from various services; conducting studies to identify and address issues related to using privately provided information services to satisfy program requirements; and developing communications portals to provide access to program information.

Highway funds apportioned to the States will continue to be used to improve traffic flow through more effective systems management and operations, including providing better information to travelers to allow them to choose departure times, travel modes, and routes that may mitigate congestion problems; implementing and maintaining incident management service patrols and promoting quick clearance laws; and developing and implementing improved strategies for work zone implementation and management.

Research and ITS

Congestion Research: \$25 million

In support of the Department's Congestion Initiative, the budget proposes to reprogram \$25 million from unobligated balances of inactive highway demonstration and other projects for the ITS R&D program to expand congestion-related research activities. These funds would support one or more new major ITS initiatives focused on reducing congestion. These major initiatives would include the research, development, and operational testing necessary to bring innovative, multi-modal solutions to the transportation marketplace. Areas to be explored would include: major advances in the acquisition and delivery of real-time traffic information; improved technology for identifying and responding to incidents; effective operational improvements to address traffic flow bottlenecks; and/or enhanced management techniques for controlling and balancing traffic flows along freeways and major arterials.

Effectively addressing traffic congestion will hinge on the ability of FHWA and State and local transportation agencies to transform traditional transportation organizations into agencies which can use advanced technologies to improve management and operations. ITS technologies have been researched, deployed, and tested during the past decade to improve the operation of the highway system and mitigate congestion.

FHWA will use FY 2008 R&D and ITS funding to:

- Continue work in partnership with the Joint Program Office on the ITS Integrated Corridor Management Initiative to develop and test the associated tools and strategies. This activity will include promoting the results of demonstrations of approaches and technologies at select test sites ("Pioneer Sites").
- Deploy and test a road weather observation network and forecasting system to promote the range of innovative value-added products that will improve traveler decision-making when faced with weather events.
- Continue to increase number of jurisdictions with Quick Clearance Best Practices and full function service patrols through outreach and technical assistance to provide targeted attention and information to key decision-makers.
- Continue efforts to ensure the necessary collaboration and coordination between the transportation, public safety, and private sector communities as required for effective traffic incident management.
- Increase the number of jurisdictions having integrated communication systems that include traffic management centers, other transportation assets and public safety responder agencies, building on the technical and outreach efforts undertaken in FY 2007.
- Continue to provide guidance and technical support to States implementing the requirements of the updated Work Zone Rule particularly through regional workshops and various peer exchange opportunities.
- Continue to champion the deployment of 511 Services and use of travel times on Dynamic Message Signs (DMS) through executive-level outreach and promotion aimed at key, high-impact locations.
- Provide technical assistance to jurisdictions implementing Real Time System Management Information Programs.
- Promote initial findings from the Congestion Management Innovation Demonstration Program, showcasing private sector capabilities to support Real Time System Management Information Programs and 511/travel times on DMS.

DOT Performance Goal: Increased investment in Corridors of the Future Program.

This funding request contributes to the DOT Reduced Congestion strategic objective and the performance outcome goal to increase investment in the Corridors of the Future Program. This request will allow the DOT, on a discretionary basis, to assist States with the development of corridors that meet the program objectives.

Milestones

Competition Announced – FY 2006 Winners Announced – FY 2007 DOT Budget and Legislative Proposals Approved – FY 2007

Funding for this performance goal: \$1.6 billion.

This request will allow the FHWA to promote innovative national and regional transportation planning and congestion mitigation solutions; illustrate the benefits of alternative financial models that employ private sector capital; employ a more efficient environmental review process; support continued growth of the U.S. economy by providing reliable transportation corridors; and develop corridors that will provide reliable freight movement needed by the U.S. economy and more efficient transportation networks that will enable the growing U.S. population to enjoy a lifestyle unhampered by congestion.

The resources requested to achieve this goal are:

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES		FY 2006 <u>ACTUAL</u>		FY 2007 CONTINUING <u>RESOLUTION</u>		FY 2007 PRESIDENT'S <u>BUDGET</u>		TOTAL 2008 <u>REQUEST</u>	
II. Reduced Congestion (continued)									
C. Increased investment in Corridors of the Future program									
Federal-aid Highways (Excludes LAE)	\$ 1,4	432,851	\$	1,282,162	\$	1,589,967	\$	1,608,183	
Transp. Infrastructure Finance and Innov. Act (TIFIA)		4,413		4,180		4,964		5,123	
Surface Transportation Program		194,230		174,592		234,467		245,611	
National Highway System	2	204,387		171,493		230,314		241,262	
Interstate Maintenance	2	206,376		173,198		232,611		243,668	
Bridge Program		152,497		127,991		171,898		180,069	
Congestion Mitigation & Air Quality Improvement									
Highway Safety Improvement Program									
Equity Bonus	2	237,430		244,648		285,771		333,172	
Equity Bonus (Exempt)		25,943		25,943		25,943		25,943	
Federal Lands Highways		28,478		25,811		34,967		36,884	
Appalachian Development Highway System		19,369		16,470		21,902		21,931	
High Priority Projects		107,308		89,419		120,699		118,644	
Projects of National and Regional Significance		15,874		16,535		22,319		21,939	
ITS Research		2,799		2,799		3,148		3,094	
Transportation Research, Training and Education		14,617		16,166		16,441		16,161	
Miscellaneous Programs	2	215,070		188,857		180,463		110,622	
Emergency Relief Program		4,060		4,060		4,060		4,060	
Congestion Initiative Corridors of the Future								[\$25,000]	
Appalachian Development Highway Systems (ADHS)		804		3,343					
Emergency Relief Supplemental (GF)	2	241,665							
PROGRAM FUND:									
SUBTOTAL PROGRAM FUND	\$ 1,0	575,320	\$	1,285,505	\$	1,589,967	\$	1,608,183	
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	15,901		14,568	\$	15,013	\$	15,484	
TOTAL REQUEST	. \$ 1,0	591,221	\$	1,300,073	\$	1,604,980	\$	1,623,667	
FTE (GOE & Federal-aid Direct)		122		112		121		120	

Performance Issue

The Federal government has an important role to play in facilitating and accelerating development of multi-State, and possibly multi-use, transportation corridors that can alleviate current or forecasted congestion. Economically based multi-State, multi-use corridor development that relies on private sector investment resources holds the promise to introduce new innovations and increase existing highway productivity.

Anticipated FY 2007 Accomplishments

FHWA will identify and select up to five corridors for administration under the Corridors of the Future Program. In addition, the DOT will introduce legislation specifically for the Corridors of the Future Program to streamline Federal reviews and approvals and address any other Federal statutory and regulatory impediments that may prevent the timely delivery of the program.

FY 2008 Performance Budget

Federal-aid Highway Program

Corridors of the Future: \$25 million

In support of the Department's Congestion Initiative, the budget proposes to reprogram \$25 million of unobligated balances of inactive highway demonstration and other projects for the Corridors of the Future program. These funds would be utilized at the discretion of the Secretary to facilitate development of selected Corridors of the Future projects. Funds would be eligible for expenditures across the spectrum of project development including preliminary engineering, and purchasing of financial or environmental expertise. In addition, other preconstruction activities such as planning, feasibility analysis, revenue forecasting (for tolled facilities), and preliminary design work would be eligible expenses.

DOT Performance Goal: Longer lasting, high performance highway infrastructure.

This request contributes to the DOT Reduced Congestion strategic objective and the performance outcome goal to achieve a longer lasting, high performance highway infrastructure.

Percentage of travel on the National Highway System (NHS) meeting pavement performance standards for good ride (less than or equal to 95 inches per mile International Roughness Index).

	2001	<u>2002</u>	<u>2003</u>	<u>2004</u>	2005	2006	2007	2008
Target:	N/A	N/A	N/A	N/A	53.0	54.0	55.5	57.0
Actual:	48.2	49.3(r)	50.0(r)	52.0(r)	51.8	54.2#		

(r) Revised; * Preliminary Estimate; # Projection

Supplemental FHWA Measures

- Percent of deficient bridges measured by deck, area, adjusted for average daily traffic, on the NHS and Non-NHS respectively.
- 3-Year Moving Average of Annual Investment in TIFIA-Assisted Projects.

Funding for this performance goal: \$11.4 billion.

This request will allow FHWA to continue to fund transportation-related improvements in the States to maintain and improve the performance of the NHS, including the Interstate system and non-NHS, and replace, rehabilitate, and preserve bridges and other infrastructure. Funds will also be used to build needed transportation facilities, support long-term research, and provide public education, technical assistance, and training to partner agencies and transportation system users. Funds will be used to promote the use of asset management principles to manage and allocate resources to improve system performance, and accelerate the adoption of innovation and new technology in highway construction. This request will also enable FHWA to fund the clean up, repair, restoration and/or reconstruction of highway facilities damaged during natural and man made disasters.

The resources requested to achieve this goal are:

(\$000)

STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES	FY 2006 <u>ACTUAL</u>	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	TOTAL 2008 <u>REQUEST</u>	
II. Reduced Congestion (continued)					
D. Improved infrastructure					
Federal-aid Highways (Excludes LAE)	\$ 10,184,998	<u>\$ 9,137,182</u>	\$ 11,232,133	\$ 11,318,616	
Transp. Infrastructure Finance and Innov. Act (TIFIA)	34,676	32,843	39,002	40,246	
Surface Transportation Program	1,052,479	946,063	1,270,510	1,330,900	
National Highway System	1,605,900	1,347,443	1,809,610	1,895,627	
Interstate Maintenance	1,314,751	1,103,388	1,481,884	1,552,324	
Bridge Program	953,106	799,942	1,074,358	1,125,429	
Congestion Mitigation & Air Quality Improvement					
Highway Safety Improvement Program					
Equity Bonus	1,871,370	1,928,263	2,252,384	2,625,983	
Equity Bonus (Exempt)	204,479	204,479	204,479	204,479	
Federal Lands Highways	217,446	197,078	266,986	281,627	
Appalachian Development Highway System	138,354	117,640	156,439	156,648	
High Priority Projects	843,136	702,576	948,349	932,201	
Projects of National and Regional Significance	88,871	92,569	124,950	122,823	
ITS Research	19,896	19,896	22,379	21,998	
Transportation Research, Training and Education	104,406	115,474	117,434	115,435	
Miscellaneous Programs	1,695,128	1,488,528	1,422,370	871,896	
Emergency Relief Program	41,000	41,000	41,000	41,000	
Appalachian Development Highway Systems (ADHS)	6,336	26,347			
Emergency Relief Supplemental (GF)	1,726,182				
PROGRAM FUND:					
SUBTOTAL PROGRAM FUND	\$ 11,917,516	\$ 9,163,529	\$ 11,232,133	\$ 11,318,616	
LIMITATION ON ADMINISTRATIVE EXPENSES	\$ 113,117	\$ 103,845	\$ 106,061	\$ 108,980	
TOTAL REQUEST FTE (GOE & Federal-aid Direct)	\$ 12,030,633 866	\$ 9,267,374 794	\$ 11,338,194 856	\$ 11,427,596 843	

Marginal Cost of Performance - Infrastructure

Empirical studies demonstrate that users perceive pavements with an International Roughness Index (IRI) of less than 95 inches per mile as being of good or very good quality. Using this measure, FHWA and the States have shown improvement over the past five years. This measure reinforces an asset management philosophy that espouses "doing the right thing at the right time." Waiting until pavements have deteriorated to what is perceived to be fair or poor condition, with an IRI of 170 inch per mile, is often too late. Once pavements reach this stage, major rehabilitation or reconstruction is the only viable alternative in many cases. It is better to make improvements when pavements are at or near the 95 inch per mile level.

As noted in the tables below, the FHWA will focus its pavement smoothness initiatives on increasing the amount of travel on pavements with good ride quality. The estimate of increased travel on pavements with good ride quality in FY 2007 and FY 2008 are based on meeting the targets for the percentage of travel with good ride quality on the NHS and an estimated VMT for FY 2006-2008. Using this approach, it is estimated that there will be an increase of 815 million miles of travel on the NHS with good ride quality. The incremental improvement from FY 2007 to FY 2008, based on a program funding increase of \$92 Million, is 43 million miles of travel. This increase in the amount of travel on pavement with good ride quality is likely to produce some user benefits such as less vehicle wear and tear, lower fuel consumption, and higher user satisfaction with the ride. However, it is difficult to quantify these benefits in economic terms when comparing pavements that are between good and fair ride quality (in the 95 to 120 inch per mile range).

Agency Output or Outcome Measure Associated with this Program increase(s): Improved infrastructure in all modes.

Performance Measure: Million vehicle miles of travel on the National Highway System (NHS) meeting pavement performance standards for good ride (less than or equal to 95 inches per mile International Roughness Index).

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>
<u>Baseline</u>					
Performance Level					
Target	696	719	740	772	815
Actual	698	690			
Incremental Performance Targ	<u>get,</u>				
Million VMT, With Program	<u>Changes</u>	-		32	43
(Total) Performance Target,					
Million VMT, With Program	<u>Changes</u>				815
Note: Actual VMT in 2004 w	as 2.963 mi	illion miles.	The estimation	ates used fo	or VMT are

Note: Actual VMT in 2004 was 2,963 million miles. The estimates used for VMT are 3,008 in 2005, 3,011 in 2006, 3,057 in 2007, and 3,145 in 2008. Percent of VMT on the NHS is 44.3 percent, based on travel in 2003.

Performance Issue

The condition of the NHS affects wear-and-tear on vehicles, the comfort of travelers, and fuel consumption. Improving the condition of pavement and bridges is critical to the structural integrity, cost effectiveness and performance of the transportation system. In addition, excessive highway construction must be avoided because it is costly and undermines system performance. Efforts continue to improve the pavement condition on the Nation's highways. The goal is to reach a target of 57.0 percent of vehicle miles traveled on NHS pavements with good ride quality (International Roughness Index (IRI) of 95 inches/mile or less) by FY 2008. As illustrated in Figure 7, the actual value for FY 2006 was 54.2 percent.

The pavement condition measure has been changed from the previous 170 inches/mile IRI to 95 inches/mile. The criteria for the pavement condition measure were revised to encourage States to focus on increasing the good quality pavements, rather than simply

minimizing the poor pavements. An IRI of less than 95 inches per mile is representative of the level of roughness that is widely perceived as of good or very good quality in terms of public perception. An IRI of 170 inches per mile is generally considered the break between fair and poor quality. This change now focused efforts of the states on increasing the good quality pavements rather than simply minimizing the poor pavements.

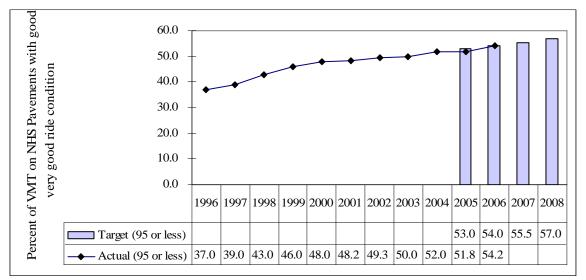


Figure 7. Pavement Condition on the NHS, 1996 to 2008.

A supplemental goal for FY 2008 is to decrease the percent of deck area on deficient bridges, adjusted for average daily traffic, to 22.0 percent on the NHS and to 25 percent on non-NHS bridges. The nationwide percentage of deck area on deficient bridges on the NHS dropped from 32.6 percent in 1998 to 29.2 percent in 2006. The results vary on the NHS by average daily traffic (ADT), with a higher percentage of deck area on deficient bridges on roads with ADT levels above 50,000. The ADT is an average 24-hour traffic volume at a given location for some period of time less than one year. The nationwide percentage of deck area on deficient bridges on the non-NHS dropped from 32.5 percent in 1998 to 30.6 percent in 2006. The results vary on the non-NHS by ADT, with a higher percentage of deck area on deficient bridges on roads with ADT levels above 50,000.

As a part of implementation of the President's National Park Legacy initiative, FLH committed through a Memorandum of Agreement between the National Park Service (NPS) and FHWA to develop additional outcome-based national performance measures. The program goals and measures supporting the Park Roads and Parkways program will reflect the progress both agencies make in improving the condition of park roads and bridges. FLH continues to work with the NPS to assess bridge conditions in our National parks on a biennial basis. FLH also examines Park Roads and Bridges using industry standards and norms and is providing critical data to the NPS for their performance measures.

Anticipated FY 2007 Accomplishments

- Continue to promote adoption of the *AASHTO Mechanistic-Empirically Pavement Design Guide* by states and industry. Pilot presentation of a new National Highway Institute (NHI) Course on this topic is scheduled to begin in late 2007. The FHWA will partner with the lead states to identify four to six States that will continue to use these procedures on projects and also host regional workshops that target calibration of the design procedure for regional or local materials and conditions.
- Demonstrate applications of process automation and electronic tracking in partnership with the pavement industry in order to demonstrate the most current technology to measure, control, and report quality of production and construction real time.
- Conduct programs with the Asphalt and Concrete Mobile Laboratory in six States to advance new technologies and performance related specifications. FHWA will conduct performance reviews in four States, co-host with industry a national workshop on percent within limits specifications, and pilot presentations for a NHI course on quality assurance and specification writing.
- Conduct workshops and data reviews in a minimum of four of the 14 opportunity States that have been identified as key states where gains in pavement smoothness will most likely affect the national trends.
- Conduct demonstrations of precast and prestressed concrete paving in a minimum of two States, warm mix asphalt design and construction in a minimum of two States, and alkali silica reactivity mitigation in a minimum of four States.
- Based on the 2005 study to evaluate the use of State pavement management data for determination of remaining service life, additional States will be selected to conduct follow-up utilization in their individual pavement management systems and evaluation of current condition and remaining service.
- Enhance the National Bridge Inspection Program to assure safety of highway bridges and structures. Provide guidance for developing design criteria to be adopted by AASHTO in the design and construction of bridges in coastal regions.
- Promote the use of high-performance materials, such as Ultra-high Performance Concrete (UHPC), High Performance Steel (HPS) and Fiber-Reinforce Polymers (FRP) as standard materials of bridge construction. Target to have at least 45 states using HPC, HPS and/or FRP in bridge construction by 2007.
- Reduce the number of scour vulnerable bridges by conducting assessment or analysis, and install countermeasures on scour critical bridges to prevent bridge failures. Select five scour critical bridges to install countermeasures against failure due to scour.
- Advance the implementation of Load Resistance Factor Design (LRFD) in foundation designs by targeting at least 35 states for implementation in FY 2007. Support AASHTO in fully implementing the LRFD Bridge Design and

Construction Specifications by October 2007. In coordination with AASHTO, promote the use of Load and Resistance Factor Rating in the condition evaluation and load rating of new and existing bridges. Target at least 8 states to test the new LRFR.

- Continue to promote Accelerated Construction Technology (ACT) through prefabricated elements and systems through regional workshops and projects. At least 45 states are considering ACT for projects.
- FHWA will continue activities to accelerate the adoption of Road Safety Audits, Prefabricated Bridge Elements and Systems and "Making Work Zones Work Better." These projects served as a model platform for a new approach to delivering vanguard technologies to significantly accelerate their adoption. In addition, FHWA will maintain an active program of information dissemination and stakeholder participation including a national workshop on the Highways for LIFE program plans and accomplishments. FHWA will also provide technical support and assistance to States willing to use Performance Contracting on Highways for LIFE projects to achieve the performance goals in safety, quality, congestion reduction and customer satisfaction.
- FHWA will select up to 15 funded Highways for LIFE projects to showcase the use of innovation and new technology to significantly improve safety, quality and customer satisfaction and reduce congestion caused by construction. Highways for LIFE projects selected in FY 2006 will begin construction. Technology transfer activities including workshops and showcases will be conducted to provide "peer-to-peer", "hands-on" opportunities for practitioners in the public sector and industry to learn about the benefits of the innovations demonstrated on the projects.
- FHWA will continue to pursue strategies to achieve higher levels of investment in surface transportation infrastructure projects through increased utilization of available TIFIA credit assistance. These strategies will include continuous outreach efforts to educate transportation agencies and other interested individuals in the transportation sector and financial community in the TIFIA program. Consistent with PART recommendations, the TIFIA Joint Program Office will establish criteria to determine instances where a loan guarantee would provide a more appropriate form of credit assistance than a direct loan.
- Support follow-up activities directed by Congress and the Secretary in improving nationwide evacuation planning and capacity building. FHWA will continue developing a variety of tools to aid emergency management, public safety, transportation and other governmental officials in their attempts to improve evacuation plans and building capacities.
- Complete the evacuation primer series and conduct Regional workshops on how to build an effective evacuation plan. Inaugurate an Emergency Transportation Operations Knowledge Management Center that will distill key information—including relevant findings, lessons learned and best practices—to be used by

officials from multiple disciplines who are engaged in emergency transportation operations.

- FLH will continue work on approximately 140 active construction projects underway and over 530 projects in the design phase.
- In 2007, FLH will complete and endorse a new Agreement with the National Park Service that includes outcome goals and measures, complete a joint program risk assessment, and identify high-risk areas and corrective actions for addressing them.

FY 2008 Performance Budget Request

Federal-aid Highway Program

Highway funds apportioned to the States will continue to be used to support the majority of projects and activities that contribute to achieving the mobility goal and this particular outcome.

Interstate Maintenance (IM) funds will be used for resurfacing, restoring, rehabilitating, and reconstructing most routes on the Interstate System. Also, IM funds will provide for the upkeep and improvement of the 46,000 mile Interstate System, which is designed as a separate identity within the NHS.

The National Highway System (NHS) funds will be used for improvements to rural and urban roads that are part of the NHS, including the Interstate System, and designated connections to major intermodal terminals.

The Surface Transportation Program (STP) funds will be used on a variety of surface transportation infrastructure projects, transit and carpool activities, bicycle and pedestrian projects, intelligent transportation systems, and management systems, on any Federal-aid highway. Using set aside STP funds, FHWA will implement a new Planning Capacity Building Initiative to support enhancements in transportation planning through research, program development, information collection and dissemination, and technical assistance. Transportation, Community and System Preservation Program (TCSP) set aside funds will be used to facilitate the planning, development, and implementation of strategies by States, Metropolitan Planning Organizations (MPOs), federally-recognized tribes, and local governments, in order to integrate transportation community, and system preservation plans and practices.

Bridge program funds will be used by States to improve the condition of bridges, including historic bridges, through replacement, rehabilitation, and systematic preventative maintenance. Also, funds will be used to promote the advancement of bridge technologies and enhance the quality of the highway bridge program delivery.

The Emergency Relief (ER) program funds will be used for the repair or reconstruction of Federal-aid highways and federally owned roads if they suffer serious damage as a result of natural disasters or catastrophic failures from an external cause. The ER program funds are critical to maintaining mobility for the American public, since natural disasters and catastrophes that destroy highways and bridges can occur anywhere in the country.

More than \$2.7 billion in Emergency Relief (ER) funds were provided in late 2005 to assist States in the repair and recovery of Federal-aid highways damaged by hurricanes. These funds were instrumental in assisting the Gulf Coast region with needed recovery efforts following the devastating impact from Hurricanes Katrina, Rita, and Wilma. The I-10 Twin Spans Bridge in Louisiana was closed due to extensive damage incurred during hurricane Katrina. Emergency repairs to the Twin Spans Bridge enabled the bridge to be reopened to traffic ahead of schedule. The FHWA has approved ER funding that will ultimately be used to replace the bridge. FHWA has also approved ER funding that will assist Mississippi in the replacement of two bridges on U.S. 90 that were completely destroyed by Hurricane Katrina. In Pascagoula, Mississippi, the substructure of a portion of the I-10 bridge was damaged during Hurricane Katrina, causing the eastbound lanes of the bridge to be closed to traffic. Emergency repairs to the bridge were completed in only 20 days, allowing the restoration of traffic to pre-disaster conditions. In addition, Alabama, Florida, and Texas received ER funds following the hurricanes. Many Federal-aid highway repairs were accomplished with the use of ER funds, including emergency roadway repairs and debris removal that opened closed roadways and allow recovery efforts to proceed quickly. In addition, funds paid for repairs to traffic signals, guardrail replacement, and restoration of washed-out pavements and shoulders caused by extensive flooding.

The Highways for LIFE (HFL) program is aimed at demonstrating dramatic improvements in the way highways are built and perform. The program will employ technologies and innovations to construct a limited number of showcase projects, and use concentrated training, marketing, and communication efforts to help the states and highway industry understand the benefits of adopting new approaches. The HFL pilot program will demonstrate and promote state-of-the-art technologies and innovations, elevated performance goals, and new business practices in the highway construction process that result in improved safety, reduced congestion from construction, improved quality, at a lower cost. FHWA will continue to provide funding to support up to 15 HFL demonstration construction projects.

The Technology Partnership Program will demonstrate the benefits of automation and electronic data reporting to improve the quality and performance of pavement construction. Technology transfer, information dissemination and stakeholder participation activities will build support and equip industry and public agencies to accelerate the adoption of innovative practices to improve safety, quality and customer satisfaction and reduce congestion due to construction.

FHWA will continue to work with States to develop a comprehensive asset management program to ensure the most effective targeting of investments in highway construction, maintenance, and systems preservation.

TIFIA credit assistance will continue to support projects that otherwise might have difficulty in obtaining financing in existing capital markets. TIFIA assistance cannot exceed 33 percent of total project costs.

Federal Lands Highway

In FY 2008, funding for the FLHP will be used for road and bridge improvements on Federal and Indian lands. Park Roads and Parkways funds will be used to support the

President's National Park Legacy initiative to reduce the backlog of maintenance needs for roads and bridges in the national parks. The specific projects that will be funded for all our partners in FY 2008 are based on the program of projects that our partners initiate through the transportation planning process. The trend data based on the past few years, coupled with the number of active design projects we have underway currently, indicates that we can anticipate improving between 700 to 1000 miles of roads and about 35 to 40 bridges in FY 2008. The improvement of these roads and bridges enables the American public to access these national treasures across the country.

Research and ITS

There is a growing need to develop a comprehensive background in system preservation technologies of roads and bridges. To meet this need, an enhanced RD&T program will be initiated for the preservation of roads and bridges. Improving pavement condition as a means of improving physical condition and performance of the NHS, including the Interstate System, remains a primary objective of the FHWA. This can only be accomplished through an extensive program that includes active outreach programs and use of innovative technology, as well as continued effort by States to effectively maintain and rehabilitate the NHS in a timely manner. Improvement in pavement condition on federally owned roads will also be supported. Further, FHWA will focus resources and grant funding on improving bridge conditions on the NHS and non-NHS routes. More widespread use of the latest highway materials and design technologies, new specifications and best practices for constructing and preserving pavements, as well as asset management tools and system preservation techniques, are expected to help maintain and improve the Nation's transportation infrastructure.

To optimize performance in the pavement design area, components will be developed that contribute to the further development of a truly mechanistic (i.e., performance predictive) design/analysis procedure and continued use and adoption of the recently developed AASHTO design procedure. Technologies will also be sought and employed to enhance highway user satisfaction by reducing delays, enhancing pavement smoothness, and optimizing surface texture for safety and noise. Initiatives in FY 2008 relate to research to support development of a fully integrated suite of tools for pavement management (including design, materials selection, construction specifications, including quality control/assurance, and preservation).

Additionally, pavements funds will be used in development of automated testing for construction and material quality assurance State process reviews, implementation of the new pavement design guide technology, development of pavement surface characteristic measuring equipment and technologies for faster construction (e.g., precast and prestressed concrete) and less energy intensive (e.g., warm asphalt) pavements, and technology to facilitate increased recycling. The Long Term Pavement Performance (LTPP) funds will be used to maximize the return on the LTPP investment, and analyze collected data with emphasis on developing products that can be applied to improve our nation's highway system.

The highway bridge and structure Research and ITS activities will focus on improved development and testing of a variety of innovative technology for non-destructive evaluation and methodologies for bridge management. The use of advanced materials such as fiber-reinforced polymer, high-performance steel and concrete, corrosion resistant reinforcing bars and corrosion resistant pre-stressing tendons will be emphasized. A systems approach to designing and building more reliable, durable bridges will also be emphasized. A wide variety of activities to assure bridge safety, reliability, and security will continue, with a particular emphasis on developing techniques to control structural corrosion and prevent other damage.

Asset management activities will focus on systematic management approaches to ameliorate the long-term cost effectiveness of highway investments. Programs include developing innovative methods for measuring and analyzing highway performance, sponsoring programs that enhance preservation of pavements and structures, encourage the further development and use of performance related specifications, increase efforts to calculate remaining service life of pavements and structures, evaluate and implement new and/or innovative techniques/traffic control devices in work zones, and research leading to the use of modern economic tools for evaluating highway investments.

FHWA will use resources to research, develop, and promote the deployment of new technologies, Asset Management Principles, materials, and analysis tools that will improve pavement and bridge performance and system cost-effectiveness. FHWA will continue to provide technical assistance and training to State officials and other partners in order to encourage the deployment of technologies, including innovative construction techniques and preservation practices that improve pavement and bridge condition. Through the sharing of best practices and the provision of training, FHWA will encourage State partners to use innovative bridge materials that are more durable and resistant to traffic loads and corrosive attack, resulting in less maintenance and fewer traffic restrictions. Adoption of these technologies should lead to overall improvements in pavement and bridge condition ratings.

New initiatives in FY 2008 focus on modeling the performance of bridges (i.e., remaining service life), enhancing construction quality through improved program management and stewardship and oversight. Fundamental research on actual costs of maintaining and operating transportation facilities, including the integration of advanced pavement modeling into a new version of the HERS-ST model, developing training in data integration techniques, encouraging improvement of management systems to monitor system performance and undertaking engineering and economic analysis as an integral part of the decision making process. The overall goal is to improve the remaining service life of the network through effective system preservation for the safe and efficient movement of people and goods on our highway transportation system.

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows: 1,699 FTE and \$219.6 million

In support of the Department's Congestion Initiative, administrative expenses funding will be utilized to support to related activities. This funding will address potential needs including:

- Increased staff support and expertise in key emerging program areas such as public private partnerships, congestion pricing, and system operations.
- Travel to congested metropolitan areas to promote key elements of the Congestion Initiative and to evaluate the benefits of major tests or demonstrations.
- Increased technical assistance to State and local partners advancing leading-edge congestion-reducing projects or programs.
- Extensive outreach and communications on the Congestion Initiative, including publication services, exhibits, and websites.

The Reduced Congestion strategic initiative is supported by information technology through a number of Mission Support and Management data systems utilized by staff in delivering the program:

Highway Performance Monitoring System (HPMS): The HPMS is a national level highway information system that includes data on the extent, condition, performance, use, and operating characteristics of the Nation's highways. In general, the HPMS contains administrative and extensive system information on all public roads, while information on other characteristics is represented in HPMS as a mix of universe and sample data for arterial and collector functional systems. Travel data from the HPMS is used by the Texas Transportation Institute to determine the nationwide results for the Urban Congested Travel measure. Pavement smoothness data reported in the HPMS is used annually to determine the nationwide condition of pavements on the NHS.

Mobility Monitoring Program (MMP) & Urban Congestion Report (UCR): Provides continued and expanded congestion monitoring capabilities and technical assistance to states through the MMP and UCR. The MMP supplies archived ITS data to the UCR, which develops congestion, mobility and reliability performance measures using data from over 20 cities. The resulting measures provide a snapshot of congestion in urban areas in the U.S. and are used by FHWA Division Offices and the state and local agencies that supply the data. Support activities will include technical assistance via the MMP program to the cities providing data to develop their own measures as well as general technical assistance with operations and reliability measure development across the U.S.

National Bridge Inventory System (NBIS): Bridge inspection data reported in the NBIS is used annually to determine the nationwide condition of bridges on the NHS and non-NHS.

FHWA uses the Transportation Analysis Simulation System (TRANSIMS) to develop regional simulations of individual activity patterns and traffic resulting from those patterns. It will forecast the location and duration of congestion and the impact of measures designed to relieve congestion. The results of TRANSIMS may be used to support decision makers in the development of regional transportation plans, project analysis and the selection of measures to relieve congestion.

FHWA uses HEPGIS Software and GIS expertise to support the Safety, Mobility, Global Connectivity, Environment, Organizational Excellence and Security strategic initiatives though the analysis and display of information. The primary function of HEPGIS is the display of data that is the official record of the National Highway System (NHS), NHS connectors, Strategic Highway System (STRAHNET), STRAHNET connectors and the Interstate. The output of GIS is used to analysis the transportation system, share information with other agencies and define which roads are eligible for Funds. GIS is also used to make this information available over the Internet.

Transportation Computer Assisted Design (TRANSCAD) software is used by FHWA/HEP to support the Congestion and Organizational Excellence strategic initiatives by providing information, data and analysis to FHWA planners on proposed projects and to allow for input into FHWA databases and IT systems, such as HEPGIS.

The Transportation Economics and Land Use Systems (TELUS) supports Safety, Congestion, Environment, and Organizational Excellence strategic initiatives by providing metropolitan planning organizations and State departments of transportation fully integrated information management and decision support system to develop their transportation improvement programs and carry out other transportation planning responsibilities, including public participation in the transportation planning process. TELUS provides an information management system that is easy to use, can store and manipulate large amounts of data, and can present these data to decision makers and the public in a coherent and timely manner.

FLH Structural Data Management System enables FLH engineers, planners, and staff in coordination with partner agencies and Indian tribes to inspect structures in accordance with the NBIS and then to aid in the selection of structures that are structurally deficient and functionally obsolete for improvement through the development of long range transportation plans and individual project contract packages for the Federal lands Highway Program. By improving individual structures the mobility and safety are improved on the roads to, through, and on Federal lands. The output from these software programs are directly linked to the preparation of FLH's portions of the Conditions & Performance (C&P) report.

FLH Management Information System enables the warehousing of data from FLH offices for business operations data, business metrics, and trends information. Information from these software programs supports FLH preparation of the C&P report.

FLH Roadway Inventory System enables FLH engineers and staff to inspect and inventory roadways that provide access to, through, and on federal lands. With this inventory, FLH in coordination with partner agencies and Indian tribes develop long range transportation plans, a program of projects, and individual construction projects for the Federal lands Highway Program. The output from these software programs are directly linked to the preparation of FLH's portions of the C&P report.

FLH Engineers Estimate and Field Management System enables FLH engineers and staff to calculate estimates for construction contract packages for roadway projects that provide access to, through, and on federal lands, track projects in the field, and prepare contract modifications. The output from these software programs are directly linked to the preparation of FLH's portions of the C&P report.

FLH Project Management Systems enables project, team, and program managers to manage individual projects within the FLH program and other special projects including project tracking, planning, baseline management, and budgeting for roadways that provide access to, through, and on federal lands. The output from these software programs are directly linked to the preparation of FLH's portions of the C&P report.

FLH Database and Application Support enables contractor personnel who perform database administration and support the Office of Federal Lands Highway as well as allow functional and program managers access to the budget, resources, and technical data necessary to make business decisions.

FLH Construction Management enables FLH engineers and staff access to construction status and project data. The output from these software programs are directly linked to the preparation of FLH's portions of the C&P report.

FLH GIS Laboratory enables the development of methods to leverage spatial data in the FLH project development and design process.

FLH Peer Review System allows FLH project managers, engineers, and staff to review highway design projects during development.

The TIFIA JPO contracts with a commercial loan servicing entity to carry out certain administrative and financial requirements related to its portfolio of project loans. The system provides loan servicing in accordance with Federal Financial Management Improvement Act/Joint Financial Improvement Program (FFMIA/JFMIP) requirements. Services include financial reporting, collections, maintenance of documents. This is a leased service, which does not include any assets owned or operated by the FHWA.

Responsible Officials:

Mr. King Gee, Associate Administrator for Infrastructure

Mr. Arthur E. Hamilton, P.E., Associate Administrator Office of Federal Lands Highway Mr. Dennis C. Judycki, Associate Administrator for Research, Development and Technology

Mr. Jeffrey F. Paniati, Associate Administrator for Operations

Mr. James D. Ray, Chief Counsel

Mr. Mark Sullivan, TIFIA Director

GLOBAL CONNECTIVITY

DOT Performance Goal: 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.

This funding request contributes to the DOT Global Connectivity strategic objective and the performance outcome goal to achieve safer, more efficient and cost effective movement of passengers and cargo.

Number of rating.	f freight corri	dors with an an	nual decrease	in the average buffe	er index		
	<u>2006</u>	<u>2007</u>	<u>2008</u>				
Target:	5	25	25				
Actual:	3						
Travel tim	Travel time reliability at land border crossings (currently under development).						
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	1 577		
Target:	Target will 2007	ll be established	l after baseline	e data is available in	early FY		
Actual:	Baseline I	Data will be ave	ailable in earl	y FY 2007.			

Funding for this performance goal: \$890.6 million.

This request will allow FHWA to fund the development and dissemination of the analytic capability and professional capacity needed by Federal, State, international and private sector partners to understand freight movement, support U.S. foreign policy priorities and initiatives including expanded opportunities and access for U.S. transportation industry, and support the FHWA's efforts to coordinate highway transportation infrastructure and operations with planned changes at U.S. land borders. This includes data analysis tools, network performance metrics, improved freight modeling capability, professional capacity building, continuation of grants for both multi-state corridor and border efforts, linkages between investment decisions and impacts on land ports of entry, linkages between freight transportation and our national and regional economies, and improved bi-national planning. States and MPOs will also use these resources to improve freight movement into and through major trade transport gateways and hubs, improve the transportation infrastructure that connects these

gateways to the Nation's mainline transportation networks, and relieve congestion related to high levels of truck traffic.

The resources requested to achieve this goal are:

(\$000)				
STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES	FY 2006 <u>ACTUAL</u>	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	TOTAL 2008 <u>REQUEST</u>
III. Global Connectivity				
A. Safer, more efficient movement of passengers and cargo through the supply chain				
Federal-aid Highways (Excludes LAE)	\$ 785,363	\$ 695,511	\$ 871,409	\$ 882,117
Transp. Infrastructure Finance and Innov. Act (TIFIA)	4,203	3,981	4,728	4,879
Surface Transportation Program	95,680	86,006	115,501	120,991
National Highway System	145,991	122,495	164,510	172,330
Interstate Maintenance	39,841	33,436	44,906	47,040
Bridge Program	136,158	114,277	153,480	160,776
Congestion Mitigation & Air Quality Improvement				
Highway Safety Improvement Program				
Equity Bonus	116,961	120,516	140,774	164,124
Equity Bonus (Exempt)	12,780	12,780	12,780	12,780
Federal Lands Highways	14,029	12,715	17,225	18,170
Appalachian Development Highway System	3,953	3,361	4,470	4,476
High Priority Projects	102,198	85,161	114,951	112,994
Projects of National and Regional Significance	3,065	3,192	4,309	4,235
ITS Research	2,558	2,558	2,877	2,828
Transportation Research, Training and Education				
Miscellaneous Programs	105,946	93,033	88,898	54,494
Emergency Relief Program	2,000	2,000	2,000	2,000
Appalachian Development Highway Systems (ADHS)	396	1,647		
PROGRAM FUND:				
SUBTOTAL PROGRAM FUND	\$ 785,759	\$ 697,158	\$ 871,409	\$ 882,117
LIMITATION ON ADMINISTRATIVE EXPENSES	\$ 7,458	7,901	\$ 8,228	\$ 8,493
TOTAL REQUEST	\$ 793,217	\$ 705,059	\$ 879,637	\$ 890,610
FTE (GOE & Federal-aid Direct)	57	60	66	66

Performance Issue

The U.S. transportation system is an integral component of our national economy, enabling the movement of \$2 trillion in goods every year. In 2003 our Nation's transportation system carried almost 500 million people between the US and Canada and the US and Mexico. International trade currently accounts for about 25 percent of the U.S. Gross Domestic Product and this figure is anticipated to grow to 35 percent in the next 20 years. As the economy continues to expand its connection to global trade, the ability to move goods into and out of the U.S., through the transportation system, only increases in importance. Significant volumes of freight move through key corridors and border crossings of our transportation network. Keeping our corridors and land border crossings as free flowing as possible is vital to our nation's economy and defense. Yet this vital component is showing increasing signs of strain. Current congestion levels on our transportation system are beginning to adversely affect the movement of goods.

The border regions with Canada and Mexico are of particular interest to the economy of the United States. Taking into consideration combined imports and exports, Canada and Mexico are our top two trading partners. In 2001, the surface modes carried \$547.3 billion in trade between the U.S., Canada and Mexico. These volumes immediately impact our border communities as well as the Nation as a whole. On the Canadian border, for example, an estimated 50 percent of the freight traffic crossing the Ambassador Bridge between Detroit and Windsor is locally bound to serve the auto

industry, which is as vital to the economy of the Detroit area as it is to the nation. Along the Mexican border, the development of the Maquiladora (Mexican assembly plants that manufacture finished goods for export) industry in the Mexican border communities of San Diego and El Paso has been the engine for economic growth in northern Mexico through job creation and exports, as well as the growth of cross border trade. In addition to the freight movement, almost one million people each day move through our land borders for a variety of reasons that range from recreation and tourism, to access to health care, to employment and visiting family and friends.

Travel time and the variability of travel time on sections of the transportation network with significant volumes of freight are key indicators of how efficiently the U.S. is able to move its goods. The FHWA began measuring travel speeds along significant freight corridors in FY 2005. As illustrated in Table A, travel speed measurements were used to calculate the average travel speed and average buffer index for the five Interstate corridors in which data were collected. Data collection expanded to 25 freight corridors in FY 2006. The buffer index represents the extra time freight carriers should add to their average travel time in order to ensure on-time arrival, at least 95 percent of the time, for an end-to-end trip along the corridor. The extra time is added to account for any unexpected delay. The buffer index, which is expressed as a percentage, decreases as trip reliability improves. As travel speed measurements used to calculate an average travel speed along any given corridor become more consistent and reliable, the number of corridors with a declining annual buffer index rating should also increase. In 2008, the target is to achieve a decline in the annual rating in all 25 corridors under study.

Between January and March 2006, the change in quarterly average travel speed for the five corridors was less than 0.3% from the same quarter last year. At the same time, the change in the quarterly average buffer index for all five corridors combined was 18.8%, an increase of 2% over the same period last year. While there was a combined increase in the average buffer index, three of the five corridors experienced a decrease. Significant increases in two corridors, I-70 and I-45, resulted in the overall combined increase in buffer index.

Corridor Name	Description (Start and End Locations)	Average Travel Speed (miles	Average Buffer
		per hour)	Index (%)
I-5	San Diego, CA (Mexican	49.7 mph	18.9 %
	Border) to Blaine, WA		
	(Canadian Border)		
I-10	Santa Monica, CA to	55.9 mph	20.8 %
	Jacksonville, FL	Ĩ	
I-45	Galveston, TX to Dallas,	54.1 mph	30.8 %
	TX	-	
I-65	Mobile, AL to Gary, IN	57.7 mph	6.8 %
		*	
I-70	Cove Fort, UT to	54.3 mph	11.1 %
	Baltimore, MD	Ĩ	

Table A. Average Travel Speed and Buffer Index on Freight Significant Corridors,FY 2006.

The buffer index represents the extra time freight carriers should add to their average travel time in order to ensure on-time arrival, at least 95 percent of the time, for an end-to-end trip along the corridor.

A second key indicator of the transportation system performance is the delay time for commercial motor vehicles entering and leaving the U.S. at ports-of-entry with Mexico and Canada. To develop a baseline measure of border delay, the FHWA will continue to benchmark outbound and inbound crossing times at selected northern and southern borders. Baseline data for this measure will be available in the Spring of 2007. Concurrent with the benchmarking activities, the FHWA will collaborate with other public and private agencies to develop strategies that produce positive results using the benchmarks.

Anticipated FY 2007 Accomplishments

FHWA will continue to work with transportation investment decision makers to ensure they have the needed information, analytic capability and professional capacity to advance transportation projects that improve freight mobility. FHWA will:

- Continue to engage State and MPO stakeholders in the development of the Freight Professional Development (FPD) Program to ensure that this program is responsive to identified needs in the transportation community. The Agency will sponsor a second Conference of FHWA Division, State, and Metropolitan Planning Organization (MPO) freight coordinators to shape and guide the FPD program.
- Target local application and use of the national data contained in both the Freight Analysis Framework (FAF) and the Freight Performance Measures (FPM) in support of local decision making. We will work with States and MPOs in

developing methods for acquiring and integrating local and national data in support of local project analysis.

- Actively promote the integration of the Electronic Freight Management's operational test results into common supply chain usage.
- Refine the research agenda developed by the Freight Model Improvement Program and begin implementing a prioritized list of research projects.
- Begin the work of improving our forecasting ability, which is key to long term planning at the national, state and local level, by developing the capacity to identify and analyze emerging trends.
- Increase the efficiency of freight movement by working with State and local partners to identify, evaluate, and improve the condition and performance of intermodal connectors.
- Actively assist States and MPOs to build public or private coalitions, both regional and local, that help integrate freight into transportation planning decision-making.
- Encourage the use of implementing technologies by States and MPOs to promote efficient movement of people and goods flows through international land ports-of-entry.
- Develop and advance institutional protocols to improve integration of transportation concerns in the movement of goods and people at international land ports-of-entry.
- Continue border technology exchange, collaboration and resource sharing mechanisms among border agencies.

FY 2008 Performance Budget Request

Federal-aid Highway Program

FHWA will continue to collaborate with State and local government agencies and the private sector to ensure more effective planning, improved data collection, modeling and analysis, and infrastructure and operational improvements. FHWA will continue to refine the FAF and FPD, continue to implement the products of the FMIP effort, and continue to create opportunities for joint planning with a variety of State, local and other Federal agencies.

Coordinated planning and collaboration with the GSA, the DHS, State Departments of Transportation and MPOs, Canada and Mexico will be continued so that better and more informed decisions for land ports of entry can be made. To carry out these efforts, FHWA, GSA and DHS will sponsor joint conferences and training opportunities.

Border Planning, Operations, and Technology program funds, as well as research funds, will be used to improve bi-national transportation planning for the U.S. borders with Mexico and Canada. FHWA will work to foster communications and coordination among GSA, the Transportation Security Administration (TSA), U.S. Customs and

Border Protection and Border States by continuing the Joint Working Committee with Mexico and the Transportation Border Working Group with Canada. Participating in various interagency task forces such as the Border Station Partnership Council, the Border Governors, the U.S./Mexico Bridges and Borders Committee, and the Customs Border Infrastructure Modeling Working Group will help to improve communications.

FHWA will also encourage States and MPOs at or near international land borders to use funds for highway and multi-modal planning or environmental studies; cross-border port of entry and safety inspection improvements, including operational enhancements as well as technology applications and transfer such as the Border Wizard planning model technology and information exchange activities, and right-of-way acquisition, design, and construction projects.

The Trans Texas Corridor, Texas project is estimated at over \$180 billion over a 50-year implementation period and consists of a new 600-mile multi-use corridor from the Oklahoma border to the Mexico border. This proposed corridor may include toll roads, high-speed passenger and freight rail, regional freight and commuter rail, and utility transportation for water, petroleum, gas and telecommunications. A Comprehensive Development Agreement was procured through a Public Private Partnership with a Spanish Developer CINTRA and US developer Zachary. This major project will respond to the continuation of rapid population growth, which will result in a substantial increase in the number of vehicles using Texas highways.

Research and ITS

Research and ITS funds will be used to help reduce barriers to trade in the transportation of goods and services and allow more efficient movement of cargo throughout the international borders. Methods of improvement include GPS applications, use of GIS applications, sensor and communications technologies, ITS technologies for freight tracking and monitoring, promotion of the Border Information Flow Architecture on both borders, and systems management and operations.

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

This funding request contributes to the DOT Global Connectivity strategic objective and the performance outcome goal to enhance the competitiveness of U.S. transport providers and manufacturers in the global marketplace.

Number of technology/information exchange agreements that promote U.S. transportation industry (target is 3 new or expanded agreements by 2011).								
	2006	<u>2007</u>	<u>2008</u>					
Target:	Targets will l	Targets will be established after baseline data is available						
Actual:	Baseline Data will be available in October 2007.							

Funding for this performance goal: \$372.7 million.

This request will allow FHWA to fund the development and dissemination of the analytic capability and professional capacity needed by Federal, State, international, and private sector partners to support U.S. foreign policy priorities and initiatives including expanded opportunities and access for U.S. transportation industry.

The resources requested to achieve this goal are:

(\$000)

(+)							
STRATEGIC & PERFORMANCE GOALS by PROGRAM ACTIVITIES		Y 2006 CTUAL	CONT	2007 INUING <u>LUTION</u>	PR	FY 2007 ESIDENT'S <u>BUDGET</u>	TOTAL 2008 EQUEST
III. Global Connectivity (continued)							
B. Enhanced competitiveness of U.S. transport providers and manufacturers in the	global	marketplace	e				
Federal-aid Highways (Excludes LAE)	\$	329,861	\$	295,199	\$	365,401	\$ 369,135
Transp. Infrastructure Finance and Innov. Act (TIFIA)		1,051		995		1,182	1,220
Surface Transportation Program		47,840		43,003		57,751	60,495
National Highway System		48,664		40,832		54,837	57,443
Interstate Maintenance		39,841		33,436		44,906	47,040
Bridge Program		34,040		28,569		38,370	40,194
Congestion Mitigation & Air Quality Improvement							
Highway Safety Improvement Program							
Equity Bonus		58,480		60,258		70,387	82,062
Equity Bonus (Exempt)		6,390		6,390		6,390	6,390
Federal Lands Highways		7,014		6,357		8,612	9,085
Appalachian Development Highway System		3,953		3,361		4,470	4,476
High Priority Projects		25,550		21,290		28,738	28,248
Projects of National and Regional Significance		3,065		3,192		4,309	4,235
ITS Research							
Transportation Research, Training and Education							
Miscellaneous Programs		52,973		46,516		44,449	27,247
Emergency Relief Program		1,000		1,000		1,000	1,000
Appalachian Development Highway Systems (ADHS)		198		823			
PROGRAM FUND:							
SUBTOTAL PROGRAM FUND	\$	330,059	\$	296,022	\$	365,401	\$ 369,135
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	3,133		3,355	\$	3,450	\$ 3,554
TOTAL REQUEST	. \$	333,192	\$	299,377	\$	368,851	\$ 372,689
FTE (GOE & Federal-aid Direct)		24		26		28	28

Performance Issue

Increasingly, the DOT and FHWA provides direct support for U.S. foreign policy priorities and initiatives, especially expanded opportunities and access for U.S. transportation industry. Currently, the Agency is providing technical assistance to countries such as Iraq, Kuwait, China, Brazil, and Argentina, thereby expanding opportunities for the U.S. private sector.

Through the International Scanning Program (in cooperation with AASHTO and NCHRP) and international partnerships, new technologies and best practices that were developed elsewhere are more quickly adopted in the U.S., thus enhancing the competitiveness of U.S. transport providers and manufacturers. As an example, over 250 million tons of Stone Matrix Asphalt has been placed in the U.S. since the technology was introduced 15 years ago. With just a 25 percent increase in the life of a pavement surface as a result of the adoption of this technology, over \$50 million is saved annually according to the National Center for Asphalt Technology.

Requests for technical assistance from government agencies and private organizations in other countries continue to increase. The Agency provides technical assistance and information exchange in response and frequently gains from these exchanges; partnering with a variety of firms and trade associations to access markets has led to millions of dollars in sales of U.S. technology.

Anticipated FY 2007 Accomplishments

- Continue the International Scanning program. Five Scans were planned for FY 2007; however, only four will likely be undertaken. The five scans are: Linking Transportation and Land Use, Warm Mix Asphalt Technologies, Bridge Inspection Quality Control, Freight Mobility and Intermodal Connectivity Asia, and Electronic Speed Enforcement.
- Finalize cooperative agreements with strategically and economically important countries, including China, India, Chile and Argentina. Cooperative and exchange activities to implement those agreements and others already in place are anticipated, which should produce opportunities for U.S. highway transportation stakeholders.
- Provide technical assistance and exchanges with several countries via a Memo of Cooperation between the U.S. DOT and the Millennium Challenge Corporation (MCC). New initiatives include exchanges with Israel and India; increasing inter-Departmental efforts on achieving foreign policy objectives, including rehabilitation work on highways and roads in tsunami-impacted areas of southeast Asia; a shift in focus from multilateral groups to establishing bilateral agreements that will have a greater payoff to U.S. transportation industry in the Western Hemisphere, Middle East and Asia; establishment of additional Technology Transfer (T2) centers that will serve Regional customers including the T2 Center in Iraq; greater involvement with the U.S. Trade Representative in trade related

agreements, such as the Central American Free Trade Agreement and the Free Trade Agreement of the Americas; a workshop regarding pavements in Brazil and collaboration with and support of the MCC.

FY 2008 Performance Budget Request

Federal-aid Highway Program

Funds will be used to continue the International Technology Scanning Program, a cooperative program with AASHTO and NCHRP which accesses and evaluates innovative foreign technologies and practices that could significantly benefit U.S. highway transportation systems. This approach allows for advanced technology to be adapted and put into practice much more efficiently without spending scarce research funds to recreate advances already developed by other countries. Scan reports will be circulated throughout the country to State and local transportation officials and the private sector.

Funds will be used to work with existing partners and to expand the number of technology transfer centers and engage in technical and information exchange activities, as well as priority technical training, in selected countries such as Iraq and Kuwait. FHWA will support the Border Technology Exchange Program that functions in a multilateral manner along the U.S. borders with Mexico and Canada. Funds will be used to facilitate critical communication between U.S. agencies and international counterparts, both bilaterally and through international forums.

Funds will be used to increase efforts on projects that will bring more immediate benefits to the United States, aiding private sector efforts in other countries, adoption of U.S.-endorsed standards, developing targeted bilateral agreements versus multilateral agreements, and best practices that may benefit State DOTs and transportation companies operating in the United States. The FHWA intends to coordinate with other federal entities, and State partners, to leverage resources in providing assistance and facilitate winning relationships between U.S. States and their foreign counterparts.

FHWA will continue to facilitate technical exchanges and relationships leading to the use of international technologies and best practices. FHWA expects to open opportunities for the private sector through its various programs, exchange information and technology with our counterparts abroad, and share the best and most current technologies and best practices with the U.S. transportation community by facilitating twinning relationships that benefit U.S., state, and international partners.

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows:

94 FTE and \$12.0 million

The Global Connectivity strategic initiative is supported by information technology through Mission Support and Management data systems utilized by staff in delivering the program:

As part of the Freight Performance Measurement (FPM) program, FHWA will continue and expand monitoring of travel times in freight-significant corridors. The FPM program captures location data from approximately 250,000 trucks. The location data is used to calculate average operating speeds and derive congestion (delay), mobility and reliability performance measures for 25 Interstate highways and up to 10,000 miles of roadways and facilities off the interstate system. The FPM program also includes a border component focused on measuring delay and crossing time at major US international land border crossings. The resulting data provide a snapshot of congestion on the intercity network and through urban areas and are used to monitor progress in FHWA's goal area of Global Connectivity. The data is used to identify freight congestion and bottlenecks on the surface highway transportation system.

FHWA uses the Freight Analysis Framework (FAF) to support the congestion strategic initiative by estimating the quantity of goods to be moved by origin and destination regions and the number of truckloads required to move those goods over the nation's highways. Data files created by the FAF are used by a variety of policy analysis programs to test the consequences of changes to commodity flows on highway capacity and the consequences of changes in highway capacity on commodity flows and economic development.

FHWA uses the Electronic Freight Manifest Program to support the congestion strategic initiative by developing a system of information flows among carriers and shippers to support greater efficiencies in truck operations and to reduce truck travel on congested highways.

FHWA uses HEPGIS Software and GIS expertise to support this strategic initiative though the analysis and display of information. The primary function of HEPGIS is the display of data that is the official record of the National Highway System (NHS), NHS connectors, Strategic Highway System (STRAHNET), STRAHNET connectors and the Interstate. The output of this system is used to analyze the transportation system, share information with other agencies, and define which roads are eligible for funds.

Responsible Officials:

Ms. Mary Phillips, Associate Administrator for Policy and Governmental Affairs. Mr. Jeffrey F. Paniati, Associate Administrator for Operations Mr. Fred Skaer, Acting Associate Administrator for Planning, Environment, and Realty

ENVIRONMENTAL STEWARDSHIP

DOT Performance Goal: Reduction in pollution and other adverse environmental effects from transportation and transportation facilities.

This funding request contributes to the DOT Environmental Stewardship strategic objective and the performance outcome goal to reduce pollution and other adverse environmental effects from transportation and transportation facilities.

12-month moving average number of areas in transportation conformity lapse.									
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	
Target:	N/A	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Actual:	6.0	6.0	6.0(r)	6.3 (r)) 5.8(r)) 1.3			

(r) Revised;

2002 2003 2004 2005 2006 2007 2008 Target: N/A 8 10 17 24 50 55
Target: N/A 8 10 17 24 50 55
Actual: 5 8 15 23 43

Funding for this performance goal: \$5.6 billion.

This request will allow FHWA to fund transportation improvement projects in states to help reduce mobile source emissions and adverse environmental effects. Funds will also be used for research, technical assistance, and public education initiatives to improve air quality.

This request will also allow the FHWA and States to protect and enhance the Nation's wetlands and aquatic resources, helps FHWA achieve its goal of conservation of natural habitats and ecosystems, protect wildlife populations while enhancing safety and reduce impacts on land and water resources. The number of Exemplary Ecosystem Initiatives undertaken will become the primary measure demonstrating accomplishment in environmental stewardship. Funds will be used for research, technical assistance, and public education initiatives to support further implementation of exemplary ecosystem and habitat conservation initiatives. These activities are consistent with congressional directives to develop rapid methods of ecosystem impact assessment and enhance the scenic beauty of highways.

The resources requested to achieve this goal are:

(*****	
(\$000)	

STRATEGIC & PERFORMANCE GOALS <u>by PROGRAM ACTIVITIES</u>	FY 2006 <u>ACTUAL</u>	FY 2007 CONTINUING <u>RESOLUTION</u>	FY 2007 PRESIDENT'S <u>BUDGET</u>	TOTAL 2008 <u>REQUEST</u>
IV. Environmental Stewardship				
A. Reduction in pollution and other adverse environmental effects from transporta	ation and transport	ation facilities		
Federal-aid Highways (Excludes LAE)	\$ 3,858,731	\$ 4,297,343	\$ 5,468,013	\$ 5,594,965
Transp. Infrastructure Finance and Innov. Act (TIFIA)	10,245	9,703	11,524	11,892
Surface Transportation Program	944,840	849,306	1,140,573	1,194,785
National Highway System	474,471	398,108	534,658	560,072
Interstate Maintenance	189,244	158,821	213,301	223,441
Bridge Program	331,885	278,551	374,108	391,891
Congestion Mitigation & Air Quality Improvement	359,256	1,151,139	1,545,901	1,619,376
Highway Safety Improvement Program				
Equity Bonus	570,183	587,518	686,274	800,105
Equity Bonus (Exempt)	62,303	62,303	62,303	62,303
Federal Lands Highways	75,405	68,341	92,584	97,661
Appalachian Development Highway System	34,588	29,410	39,110	39,163
High Priority Projects	249,109	207,579	280,194	275,423
Projects of National and Regional Significance	29,879	31,122	42,009	41,294
ITS Research				
Transportation Research, Training and Education	10,088	11,157	11,346	11,153
Miscellaneous Programs	516,485	453,535	433,378	265,656
Emergency Relief Program	750	750	750	750
Appalachian Development Highway Systems (ADHS)	1,931	8,027		
PROGRAM FUND:				
SUBTOTAL PROGRAM FUND	\$ 3,860,662	\$ 4,305,370	\$ 5,468,013	\$ 5,594,965
LIMITATION ON ADMINISTRATIVE EXPENSES	\$ 36,643	48,791	\$ 51,632	\$ 53,871
TOTAL REQUEST	\$ 3,897,305	\$ 4,354,161	\$ 5,519,645	\$ 5,648,836
FTE (GOE & Federal-aid Direct)	280	373	417	417

Performance Issue

The National Ambient Air Quality Standards (NAAQS) address six criteria pollutants that are among the most serious airborne threats to human health. Transportation is a major contributor for some of these pollutants, particularly ozone, carbon monoxide, and particulate matter. Over the past 20 years, contributions of emissions from on road mobile sources to all emissions have been rapidly declining. For example, on road mobile source emissions decreased 68, 36, 57, and 59 percent, respectively, for Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx), Particulate Matter (PM₁₀) and Carbon Monoxide (CO) between 1980 and 2003. The downward trend in on-road mobiles sources emissions is expected to continue through 2030 as a result of the introduction of cleaner engines and fuels.

Though solid progress has been made to reduce airborne threats, more needs to be done to improve air quality. Areas exceeding or maintaining the NAAQS are required to meet transportation conformity requirements in the Clean Air Act. During the past eight years, the percent of nonattainment and maintenance metropolitan areas that met their emissions goals has increased and the number of metropolitan areas meeting their emissions goals is expected to increase.

During FY 2005, on average, 88 percent of Ozone areas, 98 percent of Carbon Monoxide areas, and 97 percent of Particulate Matter areas designated as nonattainment and maintenance had met their on-road mobile source emissions budgets. The percentage for Ozone is down from 2004 due mainly to the conformity deadline of June 15, 2005 that

added 126 new 8-hour Ozone nonattainment areas. However, the levels have been consistently high for CO and PM_{10} , and the overall trend is generally favorable.

At the end of FY 2006, there were no areas in a conformity lapse. In 2006, the average number of areas in a conformity lapse at any given time was 1.3 percent, less than 1 percent of approximately 300 designated nonattainment or maintenance areas. In early 2005, the EPA designated an additional 208 counties, or 39 areas, as nonattainment under the new PM_{2.5} standards. Transportation conformity applied in these new nonattainment areas on April 5, 2006, one year after the effective date of the nonattainment designations. Because all of the PM_{2.5} nonattainment areas subject to the new standard determined conformity by the deadline, projects and program development were not delayed.

Wetlands are important natural ecosystems that filter pollutants and minimize potential floodwater damage. They provide essential habitat for the maintenance of diverse plant and animal life. Before their value was fully recognized, many of the Nation's wetlands were adversely affected or lost in the development of transportation and other infrastructure facilities. In 1996, FHWA established a national policy on wetland protection that called for a net gain of wetlands in federally assisted projects. In accordance with Section 404 of the *Clean Water Act* and Executive Order 11990, *Protection of Wetlands*, highway and transportation agencies must consider the environmental impacts of siting, construction, and operation of transportation facilities on wetlands and other aquatic resources, and provide compensatory mitigation for unavoidable impacts to and losses of, waters of the United States.

Since FHWA has replaced at least 1.5 acre to every one acre of wetlands lost throughout the Federal aid highway program during the past ten years, achieving the stated performance objective is now viewed as routine practice. Protection of these resources remains a national priority and is a requirement under various Federal statutes and regulations, such as the *Clean Water Act*, *Endangered Species Act*, the *Noxious Weed* Executive Order, and *Migratory Bird Treaty Act* and associated implementing rules, as well as state laws and regulations.

The measure of Exemplary Ecosystem Initiatives (EEI) undertaken is the primary measure demonstrating accomplishment in environmental stewardship. An EEI is an action or measure that will help sustain or restore natural ecosystems and their functions and values, using an ecosystem or landscape approach. Examples include mitigation projects that support wildlife movement and habitat connectivity, maintain ecosystem integrity, implement watershed-based environmental assessment and mitigation approaches, and encourage the use of wetland and habitat banking and the use of special measures to prevent invasive species along highway rights-of-way. In FY 2008, FHWA will continue to increase the number of EEI towards the long-term goal of 55 initiatives in at least 20 States or Federal Lands Divisions. Recent trends and targets are illustrated in Figure 6. The FHWA recognized 20 new EEI in 2006, exceeding by thirteen the target of designating seven additional initiatives and bringing the total number that FHWA has designated thus far to 43.

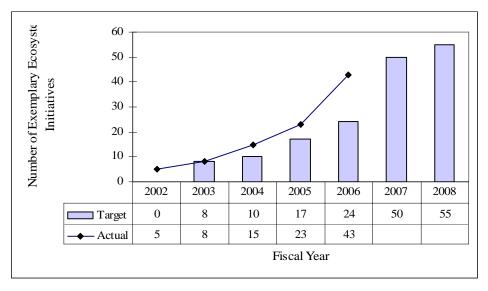


Figure 6. Exemplary Ecosystem Initiatives, FY 2002 to 2008.

FHWA increases ecosystem and habitat conservation in areas impacted by transportation projects by encouraging the implementation of exemplary initiatives that are either unique in geographic scope or are recognized as particularly valuable from an environmental perspective, applying innovative scientific and technological practices, and attaining a high level environmental standard. This approach is illustrated in Figure 8.

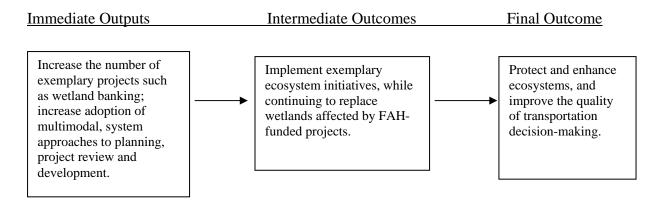


Figure 8. Relationship Between Ecosystem Protection Outputs and Outcomes.

Anticipated FY 2007 Accomplishments

• FHWA will continue to work closely with States, MPOs, FTA and EPA to reduce on-road mobile source emissions. With implementation of the new SAFETEA-LU provisions, FHWA expects State and local partnering agencies to fund and implement even more cost-effective strategies often focusing on heavy-duty diesel emissions. Emissions from diesel engines, contrary to those of gasoline engines have increased since 1970 and present great potential for cost-effective emission reductions.

- FHWA will seek to increase the already high percentage of nonattainment and maintenance areas meeting the mobile source emissions budgets for ozone, carbon monoxide, and particulate matter. With the implementation of more stringent standards for ozone and fine particulate matter, FHWA will continue to address the impact of the regulatory changes and to maintain area transportation conformity lapses at current low levels during FY 2007.
- Through improved integrated transportation and air quality planning, the transportation conformity process is designed to ensure that emissions from an area's transportation system are consistent with Clean Air Act goals. While there are multiple causes for a lapse, FHWA will monitor the number of lapses as an early indicator of our success in achieving the national targets for emissions reductions.
- SAFETEA-LU required EPA to revise the conformity regulation to reflect all transportation conformity changes by August 2007. FHWA will be working with EPA and FTA in the rulemaking process. FHWA will work with our State and local partners to implement the new provisions under the Congestion Mitigation and Air Quality (CMAQ) program and evaluate projects funded under it.
- FHWA will continue outreach for the *Ecological* handbook, develop training for new assessment tools, and implement the results of the NAS report through development of a rapid ecosystem assessment methodology.
- FHWA will also complete work on the Wildlife Vehicle Collision Study mandated in SAFETEA-LU.

FY 2008 Performance Budget Request

Federal-aid Highway Program

Since its inception in 1992, the CMAQ program has funded more than \$1 billion annually in transportation projects, targeting improvements in air quality. More recently investment levels have exceeded \$1.5 billion annually. In 2008, the program will continue to help States with nonattainment and maintenance areas to implement specific initiatives for reducing transportation-related emissions. More cost-effective measures focusing on diesel emissions from freight are anticipated stemming from the new SAFETEA-LU provisions.

A major evaluation and assessment effort will be undertaken largely in FY 2007-2008 to gauge the air quality impact of CMAQ projects. The assessment program also includes the development of a CMAQ database to track and help ensure the effective implementation of the program.

NHS and STP funds will be used to support projects that reduce the social and environmental impact of system infrastructure improvements. FAHP funds apportioned to States and metropolitan areas will be used for planning activities, including the development of transportation plans that meet necessary conformity requirements. The States will use FAHP funds apportioned for the NHS, STP, and Bridge programs to support various programs, including wetland and natural habitat mitigation, to reduce the environmental impacts to the larger watershed areas of transportation projects.

In FY 2008, FHWA will continue to encourage States to use STP and NHS funds for projects to control invasive species and encourage adoption of native plants on projects, for pollution abatement and environmental restoration projects, and brown field site remediation efforts. These actions will contribute to minimizing the environmental impacts of federally assisted transportation projects. Continued and new training and coordination activities will help implement the principles embodied in Eco-logical and development and implementation of the rapid ecosystem impact methodology for NEPA will improve efforts to streamline environmental and natural resource coordination and compliance measures.

Federal Lands Highway

FLHP funds will be used to identify project alternatives that would avoid or minimize impacts to wetlands as a first consideration. If wetland disruption is unavoidable, FHWA will mitigate wetland impacts on Federal lands by wetland replacement or investment in a wetland bank. FHLP funds will be used to contribute to increasing the number of exemplary initiatives towards the Agency-wide long-term goal. Finally, FHLP funds will be used to contribute to minimizing the environmental impacts of federally assisted transportation projects.

FLH will continue working with its partners to require more information on environmental resources and related conservation plans. For example, most states have developed a comprehensive wildlife conservation strategy, also known as Wildlife Action Plans, which is intended to help conserve wildlife and vital natural areas before they become too rare and costly to protect. This type of environmental information can help identify issues and better define scope of work for a proposed project.

One example of the benefits brought to the FLH on specific projects was in Montana. While working on a complicated federal lands project in NW Montana, FLH held multiagency team meetings with over 20 members representing regulatory, land owning, and transportation interests in order to foster collaboration as well as improve stewardship and streamlining during the environmental process. Studies by local universities are being conducted to provide modeling of ecosystems that will aid development of future projects. Another of the results of this particular project is that FLH is now more closely working with federal, state, and local agencies to discuss transportation projects and regulatory issues in the state of Montana on future projects in the very early stages of developments and planning to further improve implementation of Executive Order 13274, *Environmental Stewardship and Transportation Infrastructure Project Reviews* in the Northwest and continue to remove obstacles in the environmental documentation phase.

Research and ITS

In FY 2008, FHWA will continue to undertake research on particulates, air toxics, the health effects of transportation emissions, energy and global climate change, CMAQ effectiveness, and evaluation of emissions models. Support for air quality and climate research will advance understanding of the relationship of surface transportation to the emerging areas of fine particulate emissions, toxic air emissions, and regional haze. The results will help the transportation community develop mitigation tools and technologies to reduce fine particulate emissions. FHWA will pursue air quality research to develop analytical techniques and cost-effective mitigation strategies to reduce transportation-related emissions, disseminate such information through State and local networks, and permit development of viable transportation programs. This research is critical so that the transportation community can assist the Secretary and Congress in assessing transportation's contribution to air quality improvement.

Based on stakeholder input, FHWA will use Surface Transportation Environment and Planning Cooperative Research Program (STEP) funds as seed money to advance transportation environment and planning research on long-term, systems issues. The research agenda is focusing on major, multi-year research initiatives to improve knowledge and understanding of cross-cutting, complex transportation-environment topics, including: land use; ecology and natural systems; planning and performance measures; human health; environmental and socioeconomic relations; advanced technologies; and emerging critical issues.

Imperviousness has been recognized as a key indicator of the ecological condition of a watershed. Many studies do not break down the watershed system into components that show better evaluation of methodologies to control and mitigate impacts. Funds will be used for research regarding land use, land cover, and surface data to determine the individual contributions of the various impervious surfaces to the overall storm water runoff issue. This research will help enable States to meet Clean Water Act National Pollutant Discharge Elimination Standards, Total Maximum Daily Load, and Section 404 requirements for highway projects.

Funds will also be used to research and support the development of wetland protection and enhancement, practical techniques of habitat restoration, and ecosystem analyses and characterization. Specific initiatives for which funding will be needed are:

- Outreach *Eco-Logical* (a collaborative initiative which is an ecosystem approach to developing infrastructure projects);
- Improved Section 7 procedures, including the web-based Biological Assessment model;
- Development of the rapid assessment methodology per TEA21 and SAFETEA;
- Enhanced outreach for research results implementation;
- Continued storm water research; and
- Pilot projects for *Eco-Logical* and ecosystem banking (acreage set-asides).

<u>DOT Performance Goal</u>: Streamlined environmental review of transportation infrastructure projects.

This funding request contributes to the DOT Environmental Stewardship and Streamlining strategic objective and the performance outcome goal to streamline environmental review of transportation infrastructure projects.

Median time in months to complete environmental impact statements (EIS) and environmental assessments (EA) for DOT-funded infrastructure projects.

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Target:	35	30	30	30	30

Actual: DOT-wide results were not reported in FY 2005.

(Supplemental FHWA Measure)

Median time in months required for all Federal-aid Highway projects to have a completed EIS or EA

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008
EIS Target:	N/A	N/A	51	48	45	40	36	36
EIS Actual:	54	80	68	54	56 (r)	57 *		
EA Target:	N/A	N/A	17	16	15	14	12	12
EA Actual:	N/A	N/A	26	25	25 (r)	43 *		

(r) Revised;

(Supplemental FHWA Measure)

- Establish timeframes for EAs and EISs and meet the schedules for 90 percent of those projects by October 2007.

Funding for this performance goal: \$97.3 million.

This request will enable FHWA to implement environmental streamlining activities that encourage States and resource agencies to establish and meet timelines for all projects with an EIS or EA, use the Executive Order 13274 to resolve obstacles to environmental review early and develop new streamlined procedures, promote widespread implementation of environmental stewardship during project development through Context Sensitive Solutions (CSS), and promote processes that integrate environment and transportation decision making in more States. In addition it serves as a surrogate for measuring implementation of the SAFETEA-LU environmental process provisions.

The resources requested to achieve this goal are:

(\$000)								
STRATEGIC & PERFORMANCE GOALS <u>by PROGRAM ACTIVITIES</u>	FY 2006 <u>ACTUAL</u>		FY 2007 CONTINUING <u>RESOLUTION</u>		FY 2007 PRESIDENT'S <u>BUDGET</u>		TOTAL 2008 <u>REQUEST</u>	
IV. Environmental Stewardship (continued)								
B. Streamlined environmental review of transportation infrastructure projects								
Federal-aid Highways (Excludes LAE)	\$	83,375	\$	76,715	\$	95,263	\$	96,385
Transp. Infrastructure Finance and Innov. Act (TIFIA)		263		249		295		305
Surface Transportation Program		11,960		10,751		14,438		15,124
National Highway System		12,166		10,208		13,709		14,361
Interstate Maintenance		9,960		8,359		11,226		11,760
Bridge Program		8,510		7,142		9,593		10,048
Congestion Mitigation & Air Quality Improvement		910		2,914		3,914		4,100
Highway Safety Improvement Program								
Equity Bonus		14,620		15,065		17,597		20,516
Equity Bonus (Exempt)		1,598		1,598		1,598		1,598
Federal Lands Highways		1,754		1,589		2,153		2,271
Appalachian Development Highway System		988		840		1,117		1,119
High Priority Projects		6,387		5,323		7,184		7,062
Projects of National and Regional Significance		766		798		1,077		1,059
ITS Research								
Transportation Research, Training and Education								
Miscellaneous Programs		13,243		11,629		11,112		6,812
Emergency Relief Program		250		250		250		250
Appalachian Development Highway Systems (ADHS)		50		206				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	83,425	\$	76,921	\$	95,263	\$	96,385
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	792		872	\$	900	\$	928
TOTAL REQUEST	. \$	84,217	\$	77,793	\$	96,163	\$	97,313
FTE (GOE & Federal-aid Direct)		6		7		8		7

Performance Issue

Project delays impede needed transportation system improvements. Streamlining of environmental reviews and documentation is essential to mitigating time delays and implementing highway projects on a more timely and cost effective basis. To date, progress has been slow because of the magnitude of the issues and the pipeline effect of complex projects with an EIS and EA initiated many years ago. States are responding to reductions in staffing and budgets at resource agencies by increasing the use of funding agreements for liaisons and data to support streamlining. Progress can be masked by the process delays created from responding to emerging issues, such as air toxics and changes in wetland banking rules.

As illustrated in Figure 8, the median time to complete an environmental review for all Federal-aid projects in FY 1999 was 79 months, or six-and-a-half years. The median time for processing an EIS declined to 54 months between FY 1999 and FY 2001. Due in part to efforts to include additional longstanding projects in the inventory, the median time increased to 80 months in 2002. The median time decreased from 68 months in FY 2003 to 57 months in FY 2006.

Despite this recent reversal in the trend, FHWA aims to decrease the median completion time for all EIS and EA projects to 36 and 12 months, respectively in FY 2008. Working with State departments of transportation, FHWA will strive to establish schedules for

completion of all EISs and EAs and advance them on schedule. In the longer-term these targets will be maintained.

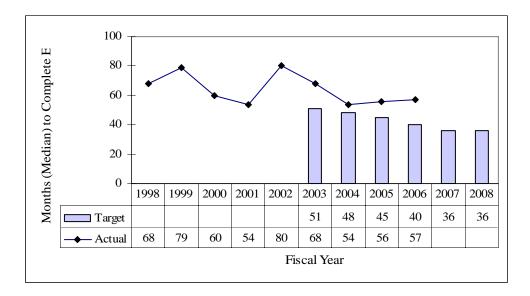


Figure 8. Median EIS Processing times, FY 1998 - 2008.

Anticipated FY 2007 Accomplishments

The FHWA will encourage States and resource agencies to establish and meet timelines for all projects with an EIS or EA. Implementation of Executive Order 13274, *Environmental Stewardship and Transportation Infrastructure Project Reviews*, will help resolve obstacles in the environmental review process at early stages for designated priority projects.

Many SAFETEA-LU environmental process provisions include tracking and reporting measures that will aid states in their continuous improvement efforts, and managers will be able to act on the results of the second *National NEPA Performance Survey*.

Federal Lands Highway continues to undertake steps to link planning and NEPA as an opportunity to streamline the environmental process. FLH continues to reach out to our FLMA partners to better define the planning processes across the FLH programs and clarify roles and responsibilities and to develop an action plan to track implementation of linking activities. FLH is currently working with FLMAs to understand and implement SAFETEA-LU provisions that change traditional agency roles and responsibilities in project delivery. In FY 2006, one development is to promote, implement, and continue support of a NEPA template from one NPS Region to all NPS Regions. By linking planning and NEPA, FLH hopes to affect the NEPA process timeline by meeting or exceeding the goals set by the agency.

After developing the training for the NHI Context Sensitive Solutions (CSS) training and as a recognized leader in CSS, FLH continues to support CSS training and works with the federal agencies of the FLH program and Indian tribes for integrated planning and

continuation of CSS. CSS is a collaborative, interdisciplinary approach to designing and constructing transportation projects that ensure safety and mobility while preserving scenic, aesthetic, historic, and environmental resources.

FY 2008 Performance Budget Request

Federal-aid Highway Program

Significant environmental process changes will be made in response to SAFETEA-LU. The Planning and Project Development Process will start to reflect the implementation of new guidance, rulemaking, and delegation pilot efforts. Assessment and tracking methods will be implemented to identify trends in environmental stewardship and streamlining. Good practices to promote and opportunities for problem solving will emerge.

Significant interagency partnering and co-funded initiatives will be needed to implement integrated planning and linking planning and NEPA state and regional efforts. Collaboration and coordination of resource agency research initiatives with transportation priorities will be accomplished through Executive Order 13274, Federal Liaisons, and the STEP outreach effort. Interdisciplinary teams of partners will be called on to form policy and program options that advance the Transportation Secretary's Congestion Initiative.

Advances in geospatial and decision support technology and the training of project development practitioners in tiered and scalable reviews are needed to address the ever growing complexity of major project development. Improved impact analysis and creative mitigation approaches are dependent on good proactive responses to changes in best available science.

The path towards community and financial support for transportation improvements is based on widespread awareness and practice of context sensitive solution principals. Many public involvement tools and methods need to be updated in response to changes in innovative financing, visualization, environmental management systems and commitment tracking systems, as well as process changes to planning and project development.

Federal Lands Highway

The FLHP funds will be used to continue activities with FLMAs to streamline the environmental efforts by identifying best practices and processes. FLH continues to track timelines for both EIS and EA, working with partner agencies to speed up the timeline, and continues to evaluate a survey with partner agencies to assess if collaboration efforts in the environmental arena are successful. FLH will evaluate the phased programming process for the FH and PRP programs and develop criteria for projects that warrant a phased programming process. FLH will monitor change in program management. EIS projects and EA projects with a wide range of location or cost alternatives should be considered for a phased process. Program management recommendations are provided.

Research and ITS

In FY 2008, FHWA will place substantial emphasis on identifying and developing timesensitive and cost-effective techniques to redesign, integrate, and balance environmental and transportation decision-making so that the environmental review process is completed in less time. FHWA anticipates placing substantial effort in implementing the environmental streamlining related provisions included in SAFETEA-LU. In addition, FHWA will continue to work with other Federal agencies and State transportation departments to advance administrative measures to streamline environmental reviews. These will involve national policy initiatives with the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the Forest Service, the EPA, the National Marine Fisheries Service and the Advisory Council on Historic Preservation. It will also involve providing support for State and regional measures that provide new models for environmental review efficiency.

The FHWA will upgrade the Environmental Document Tracking System and conduct follow up survey of transportation and environmental agency staff perceptions. This will allow a comparison between 2003 and 2006 survey results and will assist in evaluating the effectiveness of various initiatives to improve interagency coordination. All these actions are intended to improve understanding of the NEPA process and to ultimately streamline environmental processing timeframes.

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows: 424 FTE and \$54.8 million

The Environmental Stewardship strategic initiative is supported by information technology through mission support and management data systems utilized by staff in delivering the program:

FHWA uses HEPGIS Software and GIS expertise to support the Safety, Mobility, Global Connectivity, Environment, Organizational Excellence and Security strategic initiatives though the analysis and display of information. The primary function of HEPGIS is the display of data that is the official record of the National Highway System (NHS), NHS connectors, Strategic Highway System (STRAHNET), STRAHNET connectors and the Interstate. The output of GIS is used to analysis the transportation system, share information with other agencies and define which roads are eligible for Funds. GIS is also used to make this information available over the Internet.

TELUS - Supports Safety, Congestion, Environment, and Organizational Excellence strategic initiatives by providing metropolitan planning organizations and State departments of transportation fully integrated information management and decision support system to develop their transportation improvement programs and carry out other transportation planning responsibilities, particularly, public participation in the transportation planning process. TELUS provides an information management system that is easy to use, can store and manipulate large amounts of data, and can present these data to decision makers and the public in a coherent and timely manner.

The Environment Document Tracking System (EDTS) allows FHWA to record and periodically update key project information needed to track the progress of active EISs and EAs. This tracking system aids in our ability to monitor project progress between major milestones and to accurately determine the total processing time from initiation of an EIS or EA to approval of the final decision document. The ability to accurately determine the length of time necessary to complete the NEPA process is essential and enhances the Agency's understanding of the average time required to prepare EISs and EAs, and the delay factors that affect the efficiency of NEPA project delivery.

CMAQ System: The CMAQ Reporting System supports both Mobility and Environment goals. The system provides comprehensive project-level information on efforts funded under CMAQ. In addition to data on the emissions reductions projected for CMAQ projects, the system tracks information on those endeavors that target congestion relief and traffic flow. In addition to reducing emissions, about 70% of CMAQ investments to date have contributed to congestion mitigation efforts.

Responsible Officials:

Ms. Gloria Shepherd, Acting Associate Administrator for Planning, Environment, and Realty

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SECURITY, PREPAREDNESS AND RESPONSE

DOT Performance Goals:

- Rapid, effective decision-making in emergencies affecting the viability of the transportation sector.
- Expert transportation sector intelligence.
- Preparedness for response to emergencies affecting the transportation sector.
- Effective response to emergencies affecting the transportation sector.

This funding request enables the FHWA and DOT to balance the need to protect critical transportation infrastructure with the safety, mobility and economic needs of the nation, respond to emergency need following disasters of all types, and providing for rapid recovery of transportation in all modes from intentional harm and natural disasters.

Funding for this performance goal: \$374.7 million.

This request will allow FHWA to enable State departments of transportation to implement critical security enhancement activities in the areas of critical infrastructure vulnerability assessments and countermeasure deployment; emergency operations, preparedness and response; freight and border security operations; and national defense mobility using the Strategic Highway Network.

This request will allow DOT to continue to address state and local needs in recovering from natural and man-made disasters, to provide technical assistance and guidance to Federal-aid Highway Program fund recipients on strategies designed to protect critical transportation infrastructure from attack as well as in responding to emergencies of all types.

The resources requested to achieve this goal are:

STRATEGIC & PERFORMANCE GOALS <u>by PROGRAM ACTIVITIES</u>	-	TY 2006 CTUAL	CONT	2007 TINUING LUTION	Р	FY 2007 PRESIDENT'S <u>BUDGET</u>	FOTAL 2008 EOUEST
V. Security, Preparedness, and Response							
A. Rapid, effective decision-making in emergencies affecting the transport. sector,	and eff	ective prep. a	and resp	onse for tra	anspo	ort. emergencies	
Federal-aid Highways (Excludes LAE)	\$	331,625	\$	297,151	\$	367,387	\$ 371,087
Transp. Infrastructure Finance and Innov. Act (TIFIA)		1,051		995		1,182	1,220
Surface Transportation Program		47,840		43,003		57,751	60,495
National Highway System		48,664		40,832		54,837	57,443
Interstate Maintenance		39,841		33,436		44,906	47,040
Bridge Program		34,040		28,569		38,370	40,194
Congestion Mitigation & Air Quality Improvement							
Highway Safety Improvement Program							
Equity Bonus		58,480		60,258		70,387	82,062
Equity Bonus (Exempt)		6,390		6,390		6,390	6,390
Federal Lands Highways		7,014		6,357		8,612	9,085
Appalachian Development Highway System		3,953		3,361		4,470	4,476
High Priority Projects		25,550		21,290		28,738	28,248
Projects of National and Regional Significance		3,064		3,192		4,309	4,235
ITS Research							
Transportation Research, Training and Education		1,765		1,952		1,986	1,952
Miscellaneous Programs		52,973		46,516		44,449	27,247
Emergency Relief Program		1,000		1,000		1,000	1,000
Appalachian Development Highway Systems (ADHS)		198		823			
PROGRAM FUND:							
SUBTOTAL PROGRAM FUND	\$	331,823	\$	297,974	\$	367,387	\$ 371,087
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	3,149		3,377	\$	3,469	\$ 3,573
TOTAL REQUEST	\$	334,972	\$	301,351	\$	370,856	\$ 374,660
Mandatory [non-add]	\$	7,390	\$	7,390	\$	7,390	\$ 7,390
Discretionary [non-add]	\$	327,582	\$	293,961	\$	363,466	\$ 367,270
FTE (GOE & Federal-aid Direct)		24		26		28	28

Performance Issue

The highway system is not only critical to the Nation's economic vitality and quality of life, but it also plays a key role in every emergency event. The transportation system must function efficiently in order to evacuate threatened populations including special needs and transit-dependent populations and pets, allow first responders to get to the scene, and facilitate the movement of supplies into and out of the area. Access to critical infrastructure during and after an incident must be safeguarded and mobility must be restored in the days and months after an event.

Anticipated FY 2007 Accomplishments

- Provide training and technical assistance to state and local transportation agencies to enable them to enhance the security of the nation's highway network and to prepare for and respond to disasters and emergencies of all types.
- Provide risk assessment and countermeasure training to state bridge engineers. The results of the pooled fund studies into blast induced loadings on bridge structures and countermeasure development work will also be disseminated through this FHWA-led training effort. The FHWA will continue its collaborative effort with AASHTO to incorporate cost effective security strategies into current and future bridge design guidance and standards.

- Incorporate the results of the Security Self Assessments conducted at the field level with each State DOT to incorporate security into the project development and business practices of the State.
- Release the results from the FHWA/TSA sponsored regional workshops that will provide concepts and ideas for state and local agencies as to how they can enhance transportation security and emergency transportation operational practices.
- Begin to deliver training, technical assistance and peer support to State departments of transportation on Risk Assessment, Emergency Transportation Operations and Evacuation Planning. The states contributing to this pooled fund effort will consider options to meet their needs in future years.
- Continue to work with TSA in the development of security policy and work to involve the many public and private sector partners in this effort through the Stakeholder Panels organized under the auspices of the National Infrastructure Protection Plan and the Transportation Sector Security Plan.
- In collaboration with the DHS and AASHTO, lead and promote bridge and tunnel security technology through workshops and conferences.
- Offer the service of FHWA Engineering Assessment Team to states and other governmental agencies in assessing the security and vulnerability of critical bridges and tunnels.

FY 2008 Performance Budget Request

Federal-aid Highways Program

Federal-aid funds allocated to States will be used to support the projects and initiatives identified in State and local security plans, such as increased bridge surveillance, retrofit of existing facilities, or the enhancement of new facilities to meet current and future security needs. State departments of transportation will use a portion of their FAHP funds to support the pooled fund Security and Emergency Operations Professional Capacity Building Program to meeting their needs for training and technical assistance in these areas. Working closely with TSA, FHWA will encourage States and local communities to use available funds to identify their critical transportation infrastructure, perform risk assessments of those facilities, and implement cost effective countermeasures to reduce risk of catastrophic loss. FHWA will encourage state and local governments to consider security program options and strategies identified during the regional workshops conducted in FY 2006-2007. FHWA will continue to provide technical assistance and training in areas ranging from risk assessment and countermeasure implementation to emergency preparedness and operations.

Research and ITS

The FHWA, together with the National Capital Planning Commission (NCPC), the Department of State, the General Services Administration, the Department of Homeland Security, and others have formed a Perimeter Security Testing Working Group to design and test aesthetically enhanced streetscape that function as barrier elements for use at federal properties federal properties nationally and abroad. FHWA contributes through the use of models and simulations initially developed for roadside hardware safety analysis. Funding is requested to engineer (including limited crash testing to verify their effectiveness) alternative barrier treatments that meet the Urban Design and Security Plan adopted by the NCPC in October of 2002. The parties have a common interest in ensuring that barrier elements that secure the perimeter of federal buildings are tested for reliability against vehicular attack and are designed to be complementary to the surrounding environment.

Proposed FHWA activities in support of national security also include:

- Develop and Deliver Security Training (TRB/AASHTO Survey found training to be a primary need identified by state DOTs)
- Identify and promote best practices and new technology in highway security
- Partner with ASSHTO Special Committee on Transportation Security in delivery of Seminars and Workshops in Highway Security

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows: 28 FTE and \$3.6 million

The Security strategic initiative is supported by information technology through mission support and management data systems utilized by staff in delivering the program:

FHWA uses HEPGIS Software and GIS expertise to support the Security strategic initiative though the analysis and display of information. The primary function of HEPGIS is the display of data that is the official record of the National Highway System (NHS), NHS connectors, Strategic Highway System (STRAHNET), STRAHNET connectors and the Interstate. GIS is used to analyze the transportation system, share information with other agencies and define which roads are eligible for funds.

Responsible Officials:

Mr. Dan Ferezan, Program Manager for Transportation Security Mr. Jeffrey F. Paniati, Associate Administrator for Operations Mr. King Gee, Associate Administrator for Infrastructure

ORGANIZATIONAL EXCELLENCE

DOT Performance Goal: Achieve strategic management of human capital, e-government goals, competitive sourcing goals, financial performance goals, and budget and performance integration goals.

This funding request contributes to the DOT Organizational Excellence strategic objective to implement the reform initiatives in the President's Management Agenda (PMA).

Funding for this performance goal: \$550.6 million.

The resources requested to achieve this goal are:

(\$000)								
STRATEGIC & PERFORMANCE GOALS <u>by PROGRAM ACTIVITIES</u>		FY 2006 <u>ACTUAL</u>	CON	Y 2007 FINUING DLUTION	Р	FY 2007 PRESIDENT'S <u>BUDGET</u>		FOTAL 2008 EOUEST
VI. Organizational Excellence								
A. Achieve strategic mgmt of human capital, e-gov goals, competitive sourcing go	als, fina	ancial perform	nance go	als, and bu	dget a	and performance i	integra	ation goals
Federal-aid Highways (Excludes LAE)	\$	486,384	\$	456,766	\$	545,070	\$	545,327
Transp. Infrastructure Finance and Innov. Act (TIFIA)		1,051		995		1,182		1,220
Surface Transportation Program		95,680		86,006		115,501		120,991
National Highway System		48,664		40,832		54,837		57,443
Interstate Maintenance								
Bridge Program		34,040		28,569		38,370		40,194
Congestion Mitigation & Air Quality Improvement		3,638		11,657		15,655		16,399
Highway Safety Improvement Program		8,644		7,128		9,538		10,025
Equity Bonus		116,961		120,516		140,774		164,124
Equity Bonus (Exempt)		12,780		12,780		12,780		12,780
Federal Lands Highways		14,029		12,715		17,225		18,170
Appalachian Development Highway System								
High Priority Projects		25,550		21,290		28,738		28,248
Projects of National and Regional Significance								
ITS Research								
Transportation Research, Training and Education		17,401		19,245		19,572		19,239
Miscellaneous Programs		105,946		93,033		88,898		54,494
Emergency Relief Program		2,000		2,000		2,000		2,000
Appalachian Development Highway Systems (ADHS)		395		1,647				
PROGRAM FUND:								
SUBTOTAL PROGRAM FUND	\$	486,779	\$	458,413	\$	545,070	\$	545,327
LIMITATION ON ADMINISTRATIVE EXPENSES	\$	4.620	-	5.195	\$	5,147	\$	5.251
TOTAL REQUEST		491,399	\$	463,608	\$	550,217	\$	550,578
Mandatory [non-add]	\$	14,780	\$	14.780	ŝ	14,780	ŝ	14,780
Discretionary [non-add]	\$	476.619	\$	448.828	ŝ	535,437	ŝ	535,798
FTE (GOE & Federal-aid Direct)	Ŧ	35		40	ć	42		41

Human Capital

The FHWA monitors the Agency's goals and performance objectives, as stated in the Strategic Implementation Plan and the Administrator's Accountability Contract with the Transportation Secretary. The performance objectives are cascaded to the performance agreements of Senior Executives, and further to the performance plans of individual employees. Individual performance plans are used as the basis for recognizing and rewarding employee accomplishments. Thus, the FHWA ensures that awards are being used to recognize achievements that advance the Agency's mission-related goals and performance objectives.

Anticipated FY 2007 Accomplishments

The numbers at the beginning of each paragraph refer to the OMB Standards of Success for Achieving/Maintaining a "Green" status for this PMA initiative.

Human Capital Plan, Succession Planning, Closing Gaps. The FHWA's Human Capital Plan will be revised to implement a new model for the achieving a multidisciplinary workforce. The Agency will strengthen succession planning initiatives by revising supervisory, management, and leadership learning strategies and by establishing a more focused approach on executive development. The FHWA anticipates that significant numbers of employees will be retiring and that effective recruitment strategies will be needed to replace the retiring workforce. While continuing to assess needed skill changes of FHWA employees through workforce planning, the Agency will make continued progress in closing gaps in mission critical occupations, e.g., financial management, engineering and government wide IT and Human Resources. The Professional Development Program (\$2.25 million) will be used to hire individuals in critical disciplines, including financial management. Recruitment incentives (\$0.3 million) will be critical to attracting individuals with the needed multidisciplinary skills. The FHWA will implement actions necessary to change the skills mix of the financial management workforce. The Agency's learning and development program (\$2.0 million) will train increasing numbers of employees in project oversight and financial management and incorporate the multidisciplinary approach and accountability at all levels of training. The Agency plans to fund rotational assignments for mid-career hires to ensure that they have the skills needed to perform on the job. Numerous training programs will be offered via videoconferencing and web conferencing. In addition, development for succession planning purposes will focus on the following areas, the executive development program, as well as new supervisor and leadership training.

The FHWA will implement recommendations for pilot field organizational alignments that lead to increased organizational flexibility to respond to changes in agency mission. (\$0.06 million for teleworking sites and related training for employees and managers in remote worksites.)

The FHWA has performance appraisal and awards systems for all SES and all General Schedule employees. Employees and supervisors will receive additional training on how

to increase the metrics in the performance standards. Feedback from OPM on FHWA's Performance Appraisal Assessment Tool will be addressed. FHWA also plans to ensure that awards are being used to recognize achievements that advance our goals and objectives. FHWA will carefully monitor that these goals and objectives, as stated in the Agency Performance Plan and the Administrator's Performance Agreement with the Secretary, are cascaded down to Senior Executives' performance objectives and to the performance plans of individual employees, and are used as the basis for recognizing and rewarding employee accomplishments. The Agency has requested \$2.7 million in GOE funds for its employee recognition and awards budget to support this strengthening of the performance culture in the FHWA.

The FHWA will continue to implement its Diversity Action Plan and create an organizational climate that enables a multidisciplinary workforce to achieve the strategic goals of the Agency. New approaches will be used to reach out to diverse groups of candidates at the mid-level. Recruitment incentives will be critical to attract individuals with diverse skills and backgrounds. The Agency will implement new initiatives to reduce the under-representation of Hispanic employees and individuals with disabilities. In addition, recommendations from the FHWA Disability Task Force will be implemented. Mediation will be used to address organizational issues when appropriate (\$0.13 million).

Under the OPM 45-day hiring model, the measurement of success will change from "average number of days" to "percentage selected within 45 days." The goal for FY 2007 is for selecting officials to sign the certificate within 45 days of the announcement closing in 65 percent of the cases. For the SES, the FHWA is developing a guideline to assist selecting officials in making selections and clearing the ERRC within 90 days.

FHWA is participating in Department-wide accountability reviews. In 2007, FHWA will implement improvements and corrective actions identified in the accountability reviews of the employee recognition system. It will conduct an accountability review of selected staffing and recruitment programs in the Talent area. Further accountability review activity will be coordinated with the DOT Accountability Review Program Plan. (\$0.04 million)

FY 2008 Performance Budget Request

<u>Human Capital Plan, Succession Planning, Closing Gaps</u>. The FHWA's Human Capital Plan will be modified to reflect new organizational approaches for implementing the Federal-aid Highway Program. The Succession Plan will be implemented to ensure its workforce has depth in leadership skills to replace retiring employees. The FHWA anticipates that significant numbers of employees will be retiring and that effective recruitment strategies will be needed to replace the retiring workforce. While continuing to assess needed skill change of FHWA employees through workforce planning, the Agency will make continued progress in closing gaps in mission critical occupations, e.g., financial management, engineering, and government-wide IT and Human Resources. The Professional Development Program (\$2.25 million) will be used to hire individuals in critical disciplines, including financial management. Recruitment incentives (\$0.3 million) will be critical to attracting individuals with the needed multidisciplinary skills. The FHWA will implement actions necessary to change the skills mix of the financial management workforce. The Agency's learning and development program (\$2.5 million) will train increasing numbers of employees in project oversight and financial management and incorporate the multidisciplinary approach and accountability at all levels of training. In addition, development for succession planning purposes will focus on the following areas, the executive development program, as well as new supervisor and leadership training. Additionally, the Agency will continue to fund rotational assignments for mid-career hires to ensure that they have the skills needed to perform on the job. Numerous training programs will be offered via videoconferencing and web-conferencing.

The FHWA will evaluate the pilot field realignments to identify issues and make changes to increase organizational effectiveness (\$0.06 million for teleworking sites and related training for employees and managers in remote worksites).

The FHWA will carefully monitor to ensure the Agency's goals and objectives, as stated in the Agency Performance Plan and the Administrator's Performance Agreement with the Secretary, are cascaded down to Senior Executives' performance objectives and to the performance plans of individual employees, and are used as the basis for recognizing and rewarding employee accomplishments. The Agency's focus on pay-for-performance will be results-driven, producing a distribution of pay adjustments and awards based on individual contribution, organizational performance, and/or team performance. Followup assessments will be conducted to measure the effectiveness of program improvements implemented as a result of previous Accountability Reviews.

The Agency also plans to ensure that awards are being used to recognize achievements that advance the Agency's goals and objectives. The Agency has requested \$2.7 million in GOE funds for its employee recognition and awards budget to support this strengthening of the performance culture in the FHWA.

The FHWA will continue to implement its Diversity Action Plan and create an organizational climate that enables a multidisciplinary workforce to achieve the strategic goals of the Agency. New approaches will be used to reach out to diverse groups of candidates at the mid-level. Recruitment incentives will be critical to attract individuals with diverse skills and backgrounds. The Agency will implement new initiatives to increase the representation of Hispanic employees and individuals with disabilities. Mediation will be used to address organizational issues when appropriate (\$0.13 million).

Under the OPM 45-day hiring model, the measurement of success for FY 2007 will change from "average number of days" to "percentage selected within 45 days." If the measurement for success changes for FY 2008, the FHWA will make any changes necessary to work toward achieving the new goal.

The FHWA will continue to integrate into our business processes additional components of an accountability system that provides consistent means to monitor and analyze agency performance on all aspects of human capital management policies, programs, and activities, which must themselves support mission accomplishment and be effective, efficient, and in compliance with merit system principles. In addition, the FHWA will participate in Department-wide accountability reviews. The FHWA will continue to implement improvements and corrective actions identified in the accountability reviews of the selected staffing and recruitment programs in the Talent area. Further accountability review activity will be coordinated with the DOT Accountability Review Program Plan (\$0.04 million).

E-Government

Anticipated FY 2007 Accomplishments

In FY 2007, the FHWA plans to continue to lead a departmental E-Government committee working on crosscutting information technology (IT) initiatives, complete the consolidation of IT infrastructure in field offices as a matter of best practice, and support the 24 E-Gov initiatives through contributions and partnering. In addition, in the Enterprise Architecture (EA) area, FHWA will continue to build an information repository and to integrate EA with capital planning. Some of the areas the Agency will focus on include establishing a target architecture, developing a transition strategy and sequencing plan, and implementing governance processes. We will also develop a process and plan for implementing Lines of Business and SmartBuy initiatives to prevent redundant or duplicative information technology investments.

Implementation of the Department of Interior's Federal Personnel and Payroll System (FPPS). In FY 2007, new versions of FPPS will be implemented as they become available.

<u>Electronic Systems for Learning and Development (eLMS)</u>. FHWA anticipates implementing the following advanced functionality within eLMS in FY2007: the Individual Development Plan (IDP).

Executive Agent/Hiring Management. In FY 2007, the Executive Agent (DOT Automated Staffing Office) will continue to enhance the automated staffing system and work with the Administrations within DOT to improve timeliness of selections. In FY 2006, the performance measurement of the 45-day model for the Department was changed to track the percentage of cases that met the 45 workday goal as opposed to the average number of days. The Executive Agent will work with each Administration to promote awareness of the goal and improve timeliness of the actions such that 80 percent of certificates are signed by the Selecting Officials within 45 workdays from the date the announcement closes. The Executive Agent will continue to reduce the average number of days to 7 days or less and to issue 90 percent of certificates within 15 days, with over 80 percent being issued within 7 days.

<u>Implementation of the Enterprise Human Resource Integration (EHRI)</u>. The Enterprise Human Resource Integration (EHRI) is an e-Government initiative under the President's Management Agenda, which includes implementation of the Electronic Official Personnel File (e-OPF). In FY 2007, the FHWA will begin to convert paper OPFs to electronic format.

FY 2008 Performance Budget Request

The FHWA anticipates the following accomplishments in the information technology (IT) e-Gov area in FY 2008:

- Continue to lead a departmental E-Government committee working on crosscutting IT initiatives. The Director of the FHWA Office of information and Management Services leads the DOT E-Gov Subcommittee. The subcommittee meets regularly throughout the year to discuss the E-Gov scorecard and strategies about "getting to green."
- Continue to improve and refine the FHWA enterprise architecture. In particular, FHWA will continue to refine and use its EA to guide and inform information technology (IT) investments in support of DOT's and FHWA's strategic objectives. We will continue to educate our Headquarters and field offices regarding the uses and benefits of EA, such as enhanced decision-making and long-range planning. Some of the areas that we will be focusing on will include streamlining business processes, ensuring business and information technology alignment, increasing information/knowledge sharing, and expanding reuse.
- Continue to improve and refine management of the FHWA IT portfolio. In particular, we will establish standards for the maintenance of all documentation concerning the business cases, construct an easily retrievable storage area for our electronic project data, and update the outlays on a yearly basis for past budget years.
- Enhance IT security. In particular, we will implement the provisions of Homeland Security Presidential Directive 12 (HSPD-12) applicable to FY 2008.
- Support the 24 E-Gov initiatives through contributions and participation; continue to support the Department in its Lines of Business and Smartbuy initiatives and its IT efforts such as infrastructure consolidation, use of enterprise licenses, and lowering IT-related costs.

<u>Implementation of the Department of Interior's Federal Personnel and Payroll System</u> (<u>FPPS</u>). In FY 2008, new versions of FPPS will be implemented as they become available.

<u>Electronic Systems for Learning and Development (eLMS)</u>. FHWA anticipates implementing the following advanced functionality within eLMS in FY2008: competencies, and building course curriculum.

<u>Executive Agent/Hiring Management.</u> In FY 2008, the Executive Agent will continue to enhance the automated staffing system and work with the Administrations within DOT to improve timeliness of selections. In FY 2006, the performance measurement of the 45-Day model for the Department was changed to track the percentage of cases that met the 45 workday goal as opposed to the average number of days. The Executive Agent will continue to work with each Administration to promote awareness of the goal and improve timeliness of the actions. In FY 2008, the Executive Agent will work with each Administration to improve the timeliness of the staffing/hiring actions, such that 85 percent of certificates are signed by the Selecting Officials within 45 workdays from the date the announcement closes and to increase to 95 percent the number of certificates issued within 15 calendar days from the date the vacancy closes.

<u>Implementation of the Enterprise Human Resource Integration (EHRI)</u>. The Enterprise Human Resource Integration (EHRI) is an e-Government initiative under the President's Management Agenda, which includes implementation of the Electronic Official Personnel File (e-OPF). In FY 2008, the FHWA will convert the remaining paper OPFs to electronic format and will implement full usage of e-OPF.

Competitive Sourcing

The FHWA Administrator remains fully committed to sustaining a "green" status for competitive sourcing on the President's Management Agenda status scorecard.

Anticipated FY 2007 Accomplishments

In FY 2007, FHWA expects to use the results of its FY 2006 and previous FAIR Act Inventories for determining whether feasibility studies are in order and to continue work begun in prior years. We will also continue to utilize our activity-based approach in compiling FHWA's annual Federal Activities Inventory Reform (FAIR) Act inventory and continue to provide written justifications for all activities determined to be unsuitable for competition.

The FHWA has begun an intensive review of the commercial training and technical assistance activities that reside in the otherwise inherently governmental and commercial work of program specialists (engineers, right-of-way specialists, environmental specialists, etc.) spread throughout the Agency nationwide. Though this review is being conducted as part of FHWA's strategic workforce planning analysis, it should also provide insights into the nature of this activity and the viability and consequences of separating this activity from other work. It is anticipated that this review will conclude in late FY 2007 at which time FHWA will review its options for future workforce actions.

The FHWA is actively participating with the Department to identify common functions among the Operating Administrations that, when collectively considered, have the potential for greater economy and efficiency through public-private competition. The FHWA's internal plans and process may need to be modified, as a result of Departmental decisions regarding functions selected for joint review.

In early 2007, the FHWA will receive the results of its first annual post competition review of the two streamlined competitions (Visual Information Services (9 FTE) and Data Collection and Analysis (19 FTE)) that were completed by the Agency in early 2005. The review is being conducted to ensure accountability by the winners of the competition for providing the services specified in the statements of work used in the public-private competitions.

In summary, planned accomplishments in 2007 are:

- a report on the review of FHWA's commercial training and technical assistance activities;
- implementation, as appropriate, of FHWA's responsibilities associated with any Departmental cross-cutting competitive sourcing activities that may be conducted during the year; and
- the final report on the results of the Agency's first annual post competition review of its previously conducted competitions.

FY 2008 Performance Budget Request

In FY 2008, FHWA will continue to use competitive sourcing as a tool that supports our workforce planning and organizational effectiveness goals. Competitive sourcing will continue to be one tool we use to help focus FHWA's efforts to achieve a most efficient and effective organization by complementing internal efficiency reviews with an added potential for external solutions.

As in other Federal agencies, virtually all of FHWA's FTE positions perform a combination of inherently governmental and commercial work. By focusing on functions and activities rather than specific positions, our FAIR Act inventories facilitate the identification of areas that may or may not be appropriate for private sector performance. This level of detail also contributes to the effectiveness of our organizational and workforce planning analyses, and helps ensure consistency in the categorization of like positions across the Agency. We want to maintain an inventory that minimizes the need for changes during subsequent annual review cycles. Short of any extraordinary influences on FHWA, our current inherently governmental and commercial inventories depict a steady state.

Planned accomplishments include 1) working to improve and enhance the alignment of our human capital management strategies with competitive sourcing; 2) continuing to participate in OST cross-cutting reviews of Departmental operations where FHWA has an FTE presence; and 3) continuing to train those Agency employees involved in the competitive sourcing process, e.g., competition officials, to ensure they have the necessary knowledge and skill to properly implement the Agency's Competitive Sourcing Program.

Financial Performance

Performance measures

Percent of major Federally than 2% annual growth in finance plan (target is 90%	the proje	ect com			1 0
Target: Actual:	<u>2004</u> N/T 50%	<u>2005</u> N/T 83%	<u>2006</u> N/T 86%	<u>2007</u> N/T	<u>2008</u> 90%
Percent of finance plan co infrastructure projects wit			5		5 1
Target: Actual:	<u>2004</u> N/T 75%	<u>2005</u> N/T 83%	<u>2006</u> N/T 86%	<u>2007</u> N/T	<u>2008</u> 90%

The resources included in the budget submission will enable FHWA to improve major project oversight and program stewardship, improve program delivery through the development of program guidance, technical assistance, tools and training.

Performance Issue

The fiscal year 2005 audit of the Highway Trust Fund (HTF) identified grants financial management oversight as a material weakness. It was also reported as a material weakness in the FY 2004 audit.

Program oversight and program stewardship are critical and ongoing strategic objectives for FHWA. In this regard, FHWA must continue to focus its resources on activities that ensure that every Federal dollar is well spent and that program operations and processes are efficient and streamlined. Monitoring the cost, schedule, and performance of Federalaid transportation infrastructure projects, especially mega-projects (those costing over \$500 million) are critical to identify problems and initiate action to mitigate risks.

In 2000, the FHWA began monitoring project cost and schedules on mega-projects by reviewing and approving project Finance Plans and annual updates. SAFETEA-LU lowered the monetary threshold for classification as a Major Project from \$1 billion to \$500 million and Project Management Plans were made mandatory for all mega-projects. The impact of the lowered monetary threshold immediately increased the number of Major Projects from 21 to 37. In addition, more than 80 potential Major Projects are currently at the environmental review stage.

Anticipated FY 2007 Accomplishments

FHWA will complete a full year under the Financial Integrity Review and Evaluation (FIRE) Program. Training will continue to be provided to the Federal-aid Division Office Administrators and Financial Managers regarding the objectives of the oversight program and techniques for accomplishing the program.

The following activities and initiatives are planned for the stewardship and oversight area: develop a National Lessons Learned Program, and cost estimating standards; deliver the Project Management for Executives course, and cost estimating training; update and revise the Finance Plan guidance; develop and implement Project Management Plan guidance.

FY 2008 Performance Budget Request

FHWA will continue implementation of the FIRE program and ongoing efforts to improve financial stewardship and oversight.

FHWA will deliver a National Lessons Learned Program to field offices for major project stewardship and oversight. Also, an NHI course on cost estimation for major projects is expected to be ready for delivery. The course will present fundamental concepts to be used for major project cost estimate validations that will assist in ensuring that major project cost estimates are accurate and complete throughout the project development process.

FHWA will continue to support project management training for Major Project oversight managers and employees actively involved in the projects. The training will help ensure that the project management plans required for major projects are consistent with Agency guidance.

Management Challenge: Getting the Most for Every Taxpayer Dollar Invested in Highway and Transit Projects.

1. Actions by FHWA and the States Are Needed To Provide Oversight of Highway Funds to Ensure Projects Are Delivered On Time, Within Budget, and Free From Fraud.

Ensure major project cost estimates and schedule milestones are credible.

In a 2003 Report to Congress, the FHWA outlined its efforts to develop a more multidisciplinary approach towards project management and oversight activities. During the past three years, the Agency has addressed four key areas: 1) Optimizing the use of internal staffing; 2) Effective recruitment of project managers; 3) Increased training for existing and new staff; and 4) Implementing specific stewardship and oversight initiatives, including the development of Project Management Plans and an Agency-wide risk management approach. <u>Optimizing the use of internal staffing.</u> In FY 2006, the FHWA continued a program to transition Agency employees from the traditional role of reviewing and approving highway engineering project level actions to an emerging role of ensuring the effectiveness of state department of transportation processes in areas that are major project drivers such as financing, controlling project level costs, schedule performance, transportation planning, maintaining funds accountability, and providing greater oversight of higher level management and financial issues (see discussion below).

FHWA also initiated an effort in FY 2005 to develop a more formal, documented approach to Project Delivery Oversight. Each Division Office was directed to survey their respective data systems that contain the project cost and schedule management elements.

<u>Effective recruitment of project managers.</u> Since major projects require more projectfocused effort, FHWA Divisions with major projects are establishing a Project Oversight Manager position. The duties of a Project Oversight Manager will include ensuring that cost estimates and schedule milestones are credible. Specifically, this guidance requires actions at major project milestones. Prior to the release of the Final Environmental Impact Statement or Environmental Assessment for a major project, the State DOT or Metropolitan Planning Organization is required to conduct an independent and unbiased validation of the cost estimate for the preferred alternative. The validation is a rigorous review of the cost estimate and schedule to ensure that it is reasonable and logical. The FHWA will then review the results of that validation to verify that the estimate includes all costs and that project uncertainties and risks have been accounted for. This validation and review process will be repeated prior to the initial financial plan and whenever major project financial plan annual updates show an increase of more than 5 percent or a schedule slippage of more than 6 months.

While continuing to assess needed skill change of FHWA employees through workforce planning, the Agency continues to make progress in closing gaps in mission critical occupations and continuing the shift to a multidisciplinary workforce. The Agency expects that the cultural shift to an organization committed to project oversight and effective financial management will be fully operational in FY 2007. The Professional Development Program is being used to hire individuals in critical disciplines, including financial management. Recruitment incentives will be critical to attracting individuals with the needed multidisciplinary skills.

Increased training for existing and new staff. In 2006, FHWA continued its effort to develop a multidisciplinary workforce. The FHWA delivered training to support implementation of a financial management improvement program, cost estimating, risk management, project management and process review. In the areas of financial management, FHWA is committed to narrowing the skill gaps identified in Department-wide assessments. We have identified areas of improvement, developed a strategy for closing the gaps and rewritten position descriptions to better identify financial management job duties and responsibilities. The FHWA is also addressing skill gaps by changing the mix of new hires to a multidisciplinary focus that includes positions other than civil engineering. Finally, FHWA assessed and evaluated positions in the 810 (Engineering) job series to determine whether the function reflects the appropriate classification.

Implementing specific stewardship and oversight initiatives. The FHWA's stewardship and oversight role was strengthened in SAFETEA-LU legislation passed last year. The legislation requires the FHWA conduct an annual review of the State department of transportation financial management systems and project delivery systems, develop minimum standards for estimating project costs and periodically evaluate State practices in these areas. It also places requirements for a Project Management Plan and Financial Plan on all Major projects of \$500 million or more, and requires each State to provide a value engineering analysis on each Federal aid project with a total cost of \$25 million or more, a bridge project of \$20 million or more, and other designated projects. In January of this year, the FHWA issued *Interim Major Project Guidance* to expand the FHWA oversight role and optimize its positive influence in the management of major projects.

The responsibility for FHWA stewardship/oversight includes monitoring and tracking the cost and schedule elements of a project, as defined in the environmental process, from the design phase to construction completion. Initial Finance Plans are required for all Major Projects prior to beginning construction. Through June 2006, FHWA has approved financial plans or their annual updates for 14 major projects. Of the 14 Major projects that have reached the Financial Plan stage, 10 of 12, or 83%, are currently on or within allowable budget variances (current cost estimates have not yet been received for 2 new projects). In addition, 12 of 14 projects, or 86%, are within the forecasted schedule completion variance.

Free up idle funds for other infrastructure expansion and preservation projects.

FHWA revised 23 CFR 630, Subpart A, Project Authorization and Agreements to address concerns with inactive obligations. This regulation change assists States and FHWA in monitoring Federal-aid highway projects and provides greater assurance that the Federal funds obligated reflect the current estimated cost of the project. FHWA will revise the Federal obligation amount if the State fails to take action as required by the regulation.

Develop a process to effectively detect improper payments and stop wasteful spending by grantees.

FHWA implemented the improper payments testing and assessment methodology into the normal grant testing procedures. We continue work to derive a nationwide improper payment rate by the end of 2006.

Clean up bad data and generate reliable financial statements.

In response to the FY 2004 audit findings, the FHWA introduced the Financial Integrity Review and Evaluation (FIRE) Program in April 2005. This program consolidated current financial oversight responsibilities of the Federal-aid division offices into a single directive, and incorporated current requirements to perform a financial management process review, review inactive projects, follow up on audit findings, assure compliance with the Single Audit Act, and assess the accounting and internal controls relating to administrative funds.

In May, the Financial Integrity Review and Evaluation (FIRE) Program initiated last year was revised to include a review of Federal-aid billing transactions that will comply with the *Improper Payments Information Act*. Based on the results of the FIRE requirements, the Division Administrators will certify the results of these activities as part of the

annual, year end Section 2, internal control, and Section 4, integrity of financial systems, certification required by the *Federal Managers' Financial Integrity Act*.

In compliance with the Single Audit Act, States are required to conduct annual audits of sample grant amounts in excess of \$300,000 dollars to ensure that appropriate controls are in place to identify any payment that should not have been made or that was made for an incorrect amount under statutory, contractual, administrative, or other legally applicable requirements, or to an ineligible recipient. The Single Audit Act requirements, and supporting OMB regulations that States comply with, are insufficient to address and identify improper payments. As a result, the DOT and OMB agreed to better define the criteria that State auditors use to evaluate improper payments and engage State DOT auditors to test the criteria. FHWA participated in a research single auditing pilot with several state agencies in FY 2006.

In FY 2007 FHWA will undertake a consolidation of FMFIA programs within the agency so that Federal-aid and Federal Land Divisions and all other FHWA organizations will fall under a single FHWA-wide FIRE program that will address the areas of value engineering and fiscal constraint.

FHWA continued the improved financial statement preparation processes and procedures that were implemented late last year. Financial and budget execution business processes were further enhanced to minimize data entry errors and streamline financial operations. Data from legacy financial systems were reconciled.

Make certain Statewide Transportation Improvement Programs (STIP) do not make misleading promises of what can realistically be accomplished.

In the past five years, fiscal constraint issues have arisen in at least 10 states and several metropolitan areas. Some have raised concerns about whether FHWA and FTA have been applying fiscal constraint adequately and consistently across the country. In response to these recent issues and the need for consistency, FHWA and FTA issued interim guidance, references, and worksheets that are intended to be a tool to assist FHWA and FTA field offices in fulfilling current law requirements for fiscal constraint. This guidance was developed in close consultation with over 20 FHWA/FTA field staff to ensure it was informed by the knowledge and experience of those who are most familiar with day-to-day planning and programming of states and MPOs.

Redouble efforts to develop a multidisciplinary workforce.

The FHWA continued a program to transition FHWA employees from the traditional role of reviewing and approving highway engineering project level actions to a new role of ensuring the effectiveness of state department of transportation processes in areas that are major project drivers. The majority of the positions filled in the FHWA Professional Development Program were by individuals from disciplines other than civil engineering, which is the traditional background. A series of multidisciplinary workshops were held for headquarters and field supervisors and managers. The Agency implemented training that focused on the development of project oversight and financial management, delivered over 30 sessions of a workshop that focuses on process review procedures, and delivered web conference seminars in the financial management area.

2. Enhancing Fraud Prevention Capabilities and Taking Aggressive Action Against Those Who Perpetrate Fraud, Including Motor Fuel Tax Evasion.

With the passage of recent legislation, including SAFETEA-LU, FHWA recognizes the need to develop and implement a consistent approach to stewardship and oversight throughout FHWA in support of its evolving oversight mission. In May, FHWA issued the *Stewardship/Oversight Agreement Guidance* to define the minimum requirements and to provide a consistent approach to developing future stewardship agreements between FHWA and the State. A policy memorandum released in June requires each FHWA office use a risk/benefit analysis to identify appropriate oversight initiatives and allocate personnel resources effectively based on risks and benefits. FHWA is implementing a two-stage structured risk management initiative. *An Interim User Guide to the Risk Management Framework* was issued to guide offices in conducting the required risk/benefit analyses.

In its relationships with State and local highway agencies, FHWA continues to stress the use of fraud indicators and reporting procedures and is working with the transportation and highway industry to include the OIG as a resource for reporting allegations of fraud, waste, and abuse on Federal-aid infrastructure construction projects.

The FHWA and the Internal Revenue Service (IRS) continue to work together to address the issue of evasion of motor fuel and other highway use taxes. An enforcement strategy, signed in January by the FHWA Administrator and the IRS Commissioner, focuses on enhancing enforcement efforts through developing and modernizing systems to improve service and enforcement; sharing best practices, lessons learned, and expertise with agencies involved with motor fuel and highway use tax enforcement; conducting outreach and education for stakeholders; and continuing research into finding solutions to the problem of evasion. Additionally, a Memorandum of Understanding identifying program-related responsibilities, accountability requirements, and funding levels, was signed in January 2006.

Budget and Performance Integration

Anticipated FY 2007 Accomplishments

The FHWA will continue efforts to integrate budget and performance by linking strategic goals and objectives.

The FHWA undertakes annual performance-based planning to continually align its goals and objectives with those in the DOT Strategic Plan. FHWA includes representatives from the Federal Transit Administration and the National Highway Traffic Safety Administration in these planning discussions. Responsibility for achieving some of the DOT performance goals, such as reducing the highway fatality rate, is shared by the FHWA with other DOT modal administrations. In addition, FHWA is collaborating with other Federal agencies to achieve shared goals and objectives such as improving park roads and bridge condition, freight movement at border crossings, international trade and commerce, environmental streamlining, and transportation security.

The FHWA will refine the methodology recently developed for attributing costs to DOT strategic objectives, and to more than one performance goal. These activities will provide the basis for a Managerial Cost Accounting (MCA) model. In FY 2007, the FHWA will continue implementation of the Labor Distribution Reporting (LDR) module in the DOT Consolidated Automated System for Time and Labor Entry (CASTLE).

FY 2008 Performance Budget Request

The FHWA will continue to align program strategies and activities to support the DOT Strategic Objectives, as outlined in the revised DOT Strategic Plan for FY 2006-2011, and continue to develop an annual *Strategic Implementation Plan* and *Accountability Contract* to link organizational and managerial performance. To advance the implementation of managerial cost accounting and activity-based budgeting, the current MCA model will fully map budget accounts and program activities to strategic objectives and performance goals. FHWA will continue to improve the MCA and unit performance reports.

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows: 41 FTE and \$5.3 million

The Organizational Excellence strategic initiative is supported by information technology through mission support and management data systems utilized by staff in delivering the program:

FMIS and DELPHI: These accounting systems are FHWA's major financial information systems for tracking obligations and expenditures of Federal-aid and Research and Technology funding on a project-by-project basis. FMIS is used by staff to closely monitor fund activity by the States on a project-by-project basis, while DELPHI allows

staff to monitor funds spent on various highway safety improvement projects and activities.

MCA: The Managerial Cost Accounting System is used by staff to review allocation of resources, link performance and cost, and better plan for budgeting financial and human resources by projects and tasks.

SUPPS: The Shared Unit Performance Planning System (SUPPS) is a web-based planning database that is used by FHWA staff to develop unit plans, link unit plans to individual performance plans, and share performance-based information with individuals in other offices agency wide.

FHWA uses HEPGIS Software and GIS expertise to support the Safety, Mobility, Global Connectivity, Environment, Organizational Excellence and Security strategic initiatives though the analysis and display of information. The primary function of HEPGIS is the display of data that is the official record of the National Highway System (NHS), NHS connectors, Strategic Highway System (STRAHNET), STRAHNET connectors and the Interstate. The output of GIS is used to analysis the transportation system, share information with other agencies and define which roads are eligible for Funds. GIS is also used to make this information available over the Internet.

TRANSCAD software is used by FHWA/HEP to support the Congestion and Organizational Excellence strategic initiatives by providing information, data and analysis to FHWA planners on proposed projects and to allow for input into FHWA databases and IT systems, such as HEPGIS.

TELUS - Supports Safety, Congestion, Environment, and Organizational Excellence strategic initiatives by providing metropolitan planning organizations and State departments of transportation fully integrated information management and decision support system to develop their transportation improvement programs and carry out other transportation planning responsibilities, particularly, public participation in the transportation planning process. TELUS provides an information management system that is easy to use, can store and manipulate large amounts of data, and can present these data to decision makers and the public in a coherent and timely manner.

FLH Database and Application Support is used to support mobility, organizational excellence, environmental stewardship, and safety by covering contractor personnel who perform database administration and support the Office of Federal Lands Highway as well as allow functional and program managers access to the budget, resources, and technical data necessary to make business decisions.

Responsible Officials:

Mr. Tom Park, Office of the Chief Financial Officer

Ms. Mary Phillips, Associate Administrator for Policy and Governmental Affairs

Ms. Patricia Prosperi, Associate Administrator for Administration

Federal Highway Administration Research, Development, Technology, & Education, and ITS Overview Budget Request for FY 2008

RESEARCH, DEVELOPMENT, TECHNOLOGY, & EDUCATION (**RDT&E**)

The Federal Highway Administration is requesting <u>\$196.4 million</u> for its program of research, development and deployment in FY 2008. FHWA is also requesting <u>\$26.7 million</u> for education and training related work. These amounts represent activities associated with deployment of safety initiatives, a restructured infrastructure program, and a variety of activities associated with environmental improvement and streamlining, security improvements, and outreach and dissemination.

INFRASTRUCTURE

FHWA is requesting <u>\$66.4 million</u> for infrastructure-related research, focusing on the major areas of pavements and bridges and structures. The pavement and bridges/structures activity each include: a) work to develop and improve technologies and techniques to assure that the Nation's infrastructure is world class from a standpoint of longevity, safety, and performance, b) work to ensure effective follow up and deployment of the improvements developed, particularly those that will speed construction and reduce congestion caused by construction and c) efforts to assess the performance of the infrastructure over the longer term.

The FHWA pavements work (\$40.8 million, including Long Term Pavement Performance -LTPP) includes research and deployment activities to optimize pavement performance, advance quality assurance systems and tools, assure a technically capable workforce, improve pavement condition and ride quality, and advance environmentally sound pavement applications. In FY 2008 FHWA will continue to take a leadership role in pavement research and continue to work with and encourage involvement of the private sector and other partners in the research process from planning and conduct of research through technology transfer. Initiatives in FY 2008 relate to development of workshops and training courses to expand the use of recently developed design/analysis software and materials characterization tests; research to support development of a fully integrated suite of tools for pavement management (including design, materials selection, construction specifications, including quality control/assurance, and preservation); stewardship reviews; web-based training and regional training centers; research to advance the state of pavement performance prediction, including development of more predictive/reliable testing equipment; deployment of trial pavement sections; performance testing of pavements; and expanded use of performance specifications for infrastructure. In addition, there will be an increased need for collaboration with industry and other stakeholders for the concrete, asphalt, aggregate and alternative materials Research, Development, & Technology roadmaps and emphasis on the use of LTPP data to capture how and why pavements perform as they do, and for determining pavement remaining service life.

FHWA works closely with FAA in the context of the USDOT RD&T Planning Council and Team to develop coordinated research plans and budget proposals for pavements. In carrying out

the program, FHWA will continue to coordinate with FAA on the following RD&T activities in order to strengthen collaboration and integration:

- FHWA has contracted with the Transportation Research Board to form a Pavement Technology Stakeholder Committee as a forum for stakeholder input on FHWA's pavement technology program. This Committee will include FAA representation.
- FAA representatives are invited to participate in FHWA-sponsored workshops and other meetings conducted to help frame pavement RD&T initiatives. For example:
 - 1. FAA representatives were active participants in a June 2006 FHWA benchmarking workshop that established a baseline for planning the work to be conducted via the SAFETEA-LU Section 5203 designated program on Alkali Silica Reactivity. FAA personnel will also be invited to comment on draft research plans arising from that workshop.
 - 2. FAA representatives will be invited to participate in an FHWA-sponsored strategic forum on Portland cement concrete mix design and analysis research to be conducted within the framework of the CP Roadmap (<u>http://www.fhwa.dot.gov/pavement/pccp/pubs/05047/index.cfm</u>). This workshop is being conducted as part of a highly collaborative approach to concrete pavement research.
 - FHWA representatives participate in technical workshops and other activities pertaining to FAA-sponsored research. For example, FHWA personnel recently participated in a proposal evaluation for the Airfield Asphalt Pavement Technology Program.

Leadership at FHWA's Turner-Fairbank Highway Research Center and the FAA tech center will continue to explore other opportunities for R&D collaboration between FAA and FHWA. Additional communication and coordination initiatives will be undertaken as appropriate.

FHWA's bridge and structures work (\$25.6 million) focuses on advances in technologies to support the Administration's high priority mobility and security goals, by developing and promoting approaches that result in longer-lasting, better performing, and more easily constructed and rehabilitated bridges and structures. Work in FY 2008 will address the development and application of advanced materials and accelerated construction technologies both for new construction and in the repair and rehabilitation of existing highway structures and systems. Work in FY 2008 will also address needed studies for improving the resilience of the built highway infrastructure in order to provide a high level of resistance against extreme events, including both natural and man-made hazards. In addition, work will continue on the development and deployment of improved technologies for inspecting and assessing bridge structural components and systems, and in developing quality data on bridge performance which can be used to improve bridge design and asset management decision-making.

FHWA's infrastructure program also includes asset management activities to develop and implement asset management principles leading to cost-effective performance of the nation's transportation infrastructure. Work is proceeding on developing and promoting innovative methods for data collection, evaluation and promotion of effective system preservation programs. Enhanced Engineering Economic Analysis tools that support cost-effective resource

allocation and programming decisions are proposed. New initiatives in FY 2008 focus on modeling the performance of bridges (remaining service life), enhancing construction quality through improved program management and stewardship and oversight. Fundamental research on actual costs of maintaining and operating transportation facilities, and including the integration of advanced pavement modeling (into a new version of HERS-ST), developing training in data integration techniques, encouraging improvement of management systems to monitor system performance and undertaking engineering and economic analysis as an integral part of the decision making process. The overall goal is to improve the remaining service life of the network through effective system preservation for the safe and efficient movement of people and goods on our highway transportation system.

PLANNING, ENVIRONMENT, AND REAL ESTATE RESEARCH

FHWA is requesting \$19.5 million in this area to support 5 research initiatives authorized in SAFETEA-LU: Transportation Economic and Land Use System (TELUS), Surface Transportation Environment and Planning Cooperative Research Program (STEP), Center for Environmental Excellence, Center for Transportation Advancement and Regional Development and the Advanced Travel Forecasting Procedures Program (TRANSIMS). Research activities to be undertaken in these areas include a variety of efforts as part of the STEP to develop a better understanding of the complex relationship between surface transportation. These will include efforts to get input from stakeholders and partners on research emphasis areas, projects and results and will be focused on the major categories that address the environment, planning and analysis tools. Other activities will include: development and deployment of a management information tool (TELUS) to assist State Departments of Transportation and Metropolitan Planning Organizations (MPOs) in developing their transportation improvement programs, particularly public involvement; providing technical assistance and forums for information sharing about best practices and training in the use of tools and decision-making processes that can assist States, MPOs, counties, rural organizations and other partners in planning and delivering environmentally sound surface transportation projects; to develop tools, including training and education and improved understanding about how comprehensive development of small metropolitan and rural regional transportation systems can be responsive to the needs of businesses and local communities; and to assist State Departments of Transportation and MPOs to implement, develop methods and provide training and technical assistance for the implementation of TRANSIMS.

OPERATIONS

FHWA is requesting <u>\$7.84 million</u> for activities in this area. The primary focus of these activities will be on congestion relief solutions. This work will mitigate the impacts of recurring congestion, as well as deal more effectively with non-recurring events that cause congestion, such as traffic incidents, work zones, adverse weather conditions and planned special events. Activities also include refining techniques to measure congestion when it occurs and to assess the performance of the highway system, as well as provide useful, real-time information to travelers. Efforts will also be directed at improving congestion management processes at the State and local level and bringing increased attention to incorporation of management and operations strategies into the transportation planning process.

FHWA is also pursuing a broad range of activities designed to improve freight movement and reduce freight-related congestion throughout the transportation network. These activities include developing skill sets and tools (analytic capacity, data, and professional capacity building) and facilitating both the public and private institutional arrangements necessary to advance freight related transportation projects and improve cross border movement. In addition to these foundational elements, metrics for freight movement on significant corridors and at border crossings are being established; research to positively correlate economic development to freight related transportation projects is being conducted; and a major initiative is underway to improve the profession's ability to model freight flows on the transportation network.

The FHWA operations research program is working closely with the Department's Intelligent Transportation Systems (ITS) program to use advanced communications and information systems to reduce congestion. For example, operations research will rely on ITS technology and tools to develop advanced corridor management strategies that will reduce travel times and increase reliability by more evenly distributing travel demand over available routes and modes.

The Department of Transportation proposes to provide resources to the Department of Defense for assessment, development, acquisition, implementation, operation, and sustainment of additional designated Global Positioning System civil capabilities beyond the second and third civil signals already contained in the current Global Positioning System Program. FHWA requests the reprogramming of <u>\$3.6 million of unobligated balances</u> of highway funds to be used to develop the new GPS L1C civil signal (modernized signal compatible with the EU Galileo Open Service signal on the new GPS III satellites), and for GPS Civil Signal Monitoring that entails software and hardware upgrades for global monitoring of all civil signals to include L1C/A, L2C, L5, and L1C.

HIGHWAY SAFETY

FHWA is requesting <u>\$13.6 million</u> for safety RT&E activities with emphasis on four core program areas. The strategic approach to safety program focuses on short and long term programs, products, and activities aimed at developing a comprehensive and sustainable safety programs, and includes the development and implementation of policies, initiatives, and tools that achieve safety research and technology goals and objectives. Activities include: implementation of the core Highway Safety Improvement Program (HSIP); advancement of safety management techniques; commercialization of the Digital Highway Measurement Vehicle; deploying the first version of the SafetyAnalyst software; evaluating the effectiveness of various safety improvements as part of a Pooled Fund effort in support of the AASHTO Strategic Highway Safety Plan; and developing and operating the 5th generation of the Highway Safety Information System.

Activities to address roadway departure crashes include the development of countermeasures to keep vehicles on the road and to reduce the severity of crashes when motorists depart the lane or road. Activities to keep vehicles on the road include refinement of an Interactive Highway Safety Design Model, and development and evaluation of countermeasures to reduce crashes at horizontal curves on two lane rural roads. Activities to reduce the severity of road departure crashes include further development of analysis methods to evaluate the severity of roadside features, and development of guidance on location and installation of roadside barriers. Further

initiatives include technology transfer activities to communicate good road departure countermeasures and programs. Recent accomplishments include the annual update releases of the Interactive Highway Safety Design Model; sharing new National Crash Analysis Center (NCAC) finite analysis models and crash test simulation results, and studies on the effectiveness of thrie-beam transitions, aesthetic guardrails, barrier height requirements, cable median barrier replacement, and other roadside hardware elements; a brochure for breakaway sign supports; and results of a domestic scan to identify good practices for incorporating safety improvements into resurfacing and restoration.

To reduce intersection fatalities, a comprehensive intersection safety program will determine safety problems and opportunities, develop and evaluate cost-effective countermeasures, and deliver products to help practitioners improve intersection safety in their jurisdictions. Initiatives planned for FY 2008 include developing safety design guidelines for novel intersection treatments, effectiveness evaluations of intersection safety improvements, assisting focus states in the development and implementation of intersection safety action plans, publishing an update to the highway-rail grade crossing handbook, and substantive safety analysis tools for interchanges. Recent accomplishments include the Signalized Intersections: Informational Guide, Road Safety Audit Guidelines, Intersection Safety Training courses, simulation of the innovative Diverging Diamond Interchange both for highway design and subject testing purposes, and surrogate safety assessment algorithms for traffic simulation models.

The FHWA also works in cooperation with NHTSA on developing and evaluating comprehensive countermeasures and appropriate tools and technology to reduce pedestrian fatalities and improve pedestrian and bicycle safety. Activities include integrating pedestrian and bicyclist issues in the planning, design, operations, and maintenance of roadway facilities, and implementing key recommendations from our partners and customers. New initiatives for FY 2008 include several studies on the impacts of traffic calming on pedestrian and bicyclist safety and a project to combine recently developed pedestrian and bicyclist expert systems (e.g., PEDSAFE, PBCAT, LOS). Recent accomplishments include: finishing a new version of PBCAT v.2; the completion of the *Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE)*, as well as the bicycle-focused companion, *BIKESAFE*; the completion of a project to assess the pedestrian safety problem for Hispanic populations in the United States and to develop marketing materials to educate this population about pedestrian safety; an update of the FHWA Pedestrian and Bicycle University Course; and publication of *Safety, Design, and Operations of Shared Use Paths*.

In addition, through an integrated and multidisciplinary approach, activities in several cross cutting program areas contribute to the achievement of safety goals and multiple objectives in areas such as:

- human factors;
- speed management;
- work zones;
- local roads;
- professional capacity building;
- Safety and ITS;

- motorcycles;
- communication and outreach; and
- visibility.

The speed management program involves:

- evaluating variable speed limits;
- speed reducing treatments on main roads through rural communities; and
- creation of rational speed limits.

Other efforts include advancing visibility technologies and work on human centered systems to incorporate performance and behavior considerations into all aspects of highway design. Previous accomplishments include:

- field tests on impacts of setting and enforcing rational speed limits;
- safety effects of pavement wedge designs to prevent edge-dropoff crashes;
- evaluations of innovative traffic control devices and other low-cost safety improvements;
- study on driver performance characteristics on curves with various delineation and pavement countermeasures; and
- development of the first generation of the Digital Highway Measurement Vehicle.

POLICY

FHWA is requesting <u>\$0.26 million</u> for the Policy Office's International Highway Transportation Outreach Program. International research activities include collaboration with and representation at other national and international organizations, technology transfer and exchange, technical assistance, and deployment of U.S. technologies. In FY 2008, initiatives will include completion of up to five international Scanning research trips (in collaboration with AASHTO), enhancement of the Western Hemispheric program (including the Border Technology Exchange Program) with an emphasis on government-to-government relations with strategically important countries (such as Mexico, Canada, Brazil, Argentina and Panama), and technical assistance to other nations, including Iraq and Kuwait.

EXPLORATORY ADVANCED RESEARCH

FHWA is requesting <u>\$12.2 million</u> for Exploratory Advanced Research. This program includes longer-term, higher-risk research with the potential for dramatic breakthroughs in surface transportation. Research targeted at incremental advances is not consistent with the Exploratory Advanced Research program. Key elements of the program will be to obtain information from the very large number of basic and advanced research and development activities outside of the highway R&D community for possible exploitation, adaptation and eventual application to the highway industry. The program will enable interaction and exchange of ideas and information between the highway community and the broader advanced research and development community, and effectively synthesize the vast amount of data and information to support strategic planning and program development for the overall Exploratory Advanced Research Program.

FUTURE STRATEGIC HIGHWAY RESEARCH PROGRAM—SHRP II

FHWA is requesting <u>\$44.7 million</u> for SHRP II, which will be conducted by the Transportation Research Board (TRB) of the National Academy of Sciences. The program is a targeted, short-term, results-oriented program of strategic highway research designed to advance highway

performance and safety for U.S. highway users. This program will include funding for the four areas of research that were identified by a TRB-established committee of leaders from the highway community. These four areas are Safety, Renewal, Reliability and Capacity. Research under the Safety area (\$17.9 million) will include work on the prevention and reduction of the severity of highway crashes by understanding driver behavior. Under the Renewal area (\$11.6 million), work will address the aging infrastructure through rapid design and construction methods that cause minimal disruption and produce long-lived facilities. Reliability (\$7.6 million) will reduce congestion through incident reduction, management, response, and mitigation. Research under the Capacity area (\$7.6 million) will integrate mobility, economic, environmental, and community needs in the planning and designing of new transportation capacity. During this year, work will also begin on the report to Congress due February 1, 2009.

U.S. DOT PARTNER ADMINISTRATIONS

FHWA is also requesting <u>\$31.9 million</u> for SAFETEA-LU programs being led by other U.S. DOT modes. This request includes <u>\$0.76 million</u> for the Office of the Secretary (OST) to administer the Center for Excellence in Project Finance. The request also includes <u>\$28.53</u> <u>million</u> for eight programs to be led by the Research and Innovative Technology Administration (RITA). These programs are: National Cooperative Freight Transportation Research, Biobased Transportation Research, Commercial Remote Sensing Products and Spatial Information Technologies, Technology Transfer Grant, Rural Transportation Research Initiative, Hydrogen-Powered Transportation Research Initiative, Cold Region and Rural Transportation Research, Maintenance, and Operations, Advanced Vehicle Technology, and Renewable Transportation Systems Research. This request also includes <u>\$0.43 million</u> for the National Highway Traffic Safety Administration (NHTSA) to conduct Automobile Accident Injury Research, <u>\$1.09 million</u> for the Federal Motor Carrier Safety Administration (FMCSA) to conduct Motor Carrier Efficiency Study, and <u>\$1.09 million</u> for the Pipeline and Hazardous Materials Safety Administration (PHMSA) to conduct Hazardous Materials Research Projects.

EDUCATION AND TRAINING

FHWA is requesting \$26.7 million to support education and training activities. The National Highway Institute (\$9.27 million) provides training courses, which present the latest technologies and best practices in highway construction. The Local Technical Assistance Program (\$10.72 million) supports technology transfer centers in all 50 states, Puerto Rico, and regional centers serving Native American tribal governments. The Dwight David Eisenhower Transportation Fellowship Program (\$2.12 million) provides opportunities for high performing students and faculty to research transportation topics. The Garret A. Morgan Technology and Transportation Education Programs (\$1.21 million) enhance science, technology, engineering, and mathematics at the elementary and secondary school level. The Transportation Education Development Pilot Program (§1.81 million) develops new curricula and education programs to train individuals at all levels of the transportation workforce. Freight Planning Capacity Building (\$0.85 million) supports enhancements in freight transportation planning. The Surface Transportation Congestion Relief Solutions Technical Assistance and Training Program (\$0.72 million) disseminates the results of the surface transportation congestion relief solutions research initiative for the purpose of assisting State transportation departments and local transportation agencies with improving their approaches to surface transportation congestion measurement, analysis, and project programming.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

The FHWA is requesting <u>\$110.0 million</u> for Intelligent Transportation Systems (ITS) programs. The ITS Program is focused on the development and deployment of technology for improving the safety and operation of our surface transportation system. Currently the ITS Program is authorized at \$110M per year. The current program is organized around nine major R&D initiatives and the Deployment Support Program. The Major Initiatives are large multi-year programs focused on a particular transportation issue with specific milestones and end goals. There are four major initiatives focused on safety, four focused on mobility and one focused on global connectivity. The Deployment Support Program consists of several programs all focused on providing the necessary tools, guidance, training, etc. to support the deployment and operation of ITS by State and local governments. These programs consist of Architecture and Standards, Professional Capacity building, Evaluation and Assessment, and Outreach.

The FHWA is also requesting to reprogram <u>\$25 million in unobligated balances</u> associated with Federal-aid highway program inactive demonstration and other projects in order to expand congestion related research activities in direct support of the Congestion Initiative.

UNIVERSITY TRANSPORTATION RESEARCH

The FHWA is requesting <u>\$69.7 million</u> for University Transportation Research. University Transportation Centers programs support 52 university-based centers that conduct state-of-theart in transportation research, undertake education activities for the next generation of transportation professionals, and for technology transfer activities. This program is funded by Title V of SAFETEA-LU and is managed by the Research and Innovative Technology Administration (RITA). Additional budget details are contained in the RITA budget submission.

BUREAU OF TRANSPORTATION STATISTICS (BTS)

Bureau of Transportation Statistics (BTS) is requesting <u>\$27.0 million</u> to support statistical activities in FY 2008. BTS is an arm of the Research and Innovative Technology Administration (RITA). The Bureau collects, compiles, analyzes, and publishes transportation statistics in areas specified in SAFETEA-LU. Key areas of focus include data on freight, travel, and aviation; transportation economics; geospatial data; and the National Transportation Library. Details on BTS's programs are included in RITA's budget request.

EXHIBIT V-1.a

RESEARCH, DEVELOPMENT & TECHNOLOGY DEPARTMENT OF TRANSPORTATION Budget Authority (in thousands of dollars)

FED	ERAL HIGHWAY ADMINISTRATION	FY 2006 Enacted	FY 2007 <u>CR</u>	FY 2007 Pres. Bud.	FY 2008 <u>Modal Req.</u>
Α.	Surface Transportation Research, Development, and Deployment Program	169,159	169,159	196,400	196,400
	1. Safety	7,003	7,003	8,296	7,488
	2. Safety (T)	5,729	5,729	6,788	6,126
	3. Pavements	17,563	17,563	20,144	20,828
	4. Pavements (T)	9,459	9,459	10,849	11,217
	5. Structures	11,775	11,775	14,514	14,054
	6. Structures (T)	9,635	9,635	11,875	11,499
	7. Policy	148	148		
	8. Policy (T)	64	64		
	9. Planning, Environment, and Realty	6,601	6,601	7,821	7,799
	10. Planning, Environment, and Realty (T)	9,902 2,542	9,902	11,731	11,698
	 Highway Operations Highway Operations (T) 	2,542 3,812	2,542 3,812	3,011 4,517	3,137 4,705
	13. Long-Term Pavement Performance	7,145	7,145	8,465	8,818
	14. International Outreach	0	0	251	261
	15. Exploratory Advanced Research	9,884	9,884	11,709	12,199
	16. Future Strategic Highway Research Program-SHRP II	36,184	36,184	42,867	44,657
	17. OST, RITA, FMCSA, NHTSA & PHMSA	14,165	14,165	17,774	16,901
	18. OST, RITA, FMCSA, NHTSA & PHMSA (T)	14,165	14,165	15,788	15,013
	19. Corporate Business	3,383	3,383		
в.	Training and Education	22,997	22,997	26,700	26,700
	1. National Highway Institute (T)	7,984	7,984	9,270	9,270
	2. Local Technical Assistance Program (T)	9,232	9,232	10,719	10,719
	3. Eisenhower Transportation Fellowship Program (T)	1,829	1,829	2,124	2,124
	4. Garret Morgan Program (T)	1,040	1,040	1,207	1,207
	5. Transportation Education Development Pilot (T)	1,560	1,560	1,811	1,811
	 Freight Planning Capacity Building (T) Surface Transportation Relief Assistance Program (T) 	728 624	728 624	845 724	845 724
c.	Intelligent Transportation Systems	94,743	94,743	110,000	110,000
	1. Research	10,549	10,549	51,667	0
	2. Operational Test	1,479	1,479	11,671	0
	3. Integration (T)	656	656	11,165	0
	4. Vehicle Infrastructure Integration	27,340	27,340	0	22,200
	5. Integrated Vehicle Based Safety Systems	2,232	2,232	0	11,000
	6. Cooperative Intersection Collision Avoidance Systems	5,470	5,470	0	19,000
	7. Next Generation 911	3,750	3,750	0 0	2,000
	 Integrated Corridor Management Emergency Management and Operations 	3,075 350	3,075 350	0	12,000 4,300
	10. Mobility Services for All Americans	2,867	2,867	0	3,000
	11. Clarus	1,426	1,426	0	2,000
	12. Road Weather Research and Development	2,880	2,880	0	3,000
	13. I-95 (T)	6,029	6,029	0	7,000
	14 Architecture and Standards (T)	5,755	5,755	17,666	7,500
	15. Professional Capacity Building (T)	3,024	3,024	0	3,500
	16. Program Assessment (T)	6,330	6,330	6,666	7,000
	17. Outreach (T)	672	672	0	1,000
	18. ITS Program Support	3,030	3,030	11,165	5,500
	19. ITS Program Support (T)	7,829	7,829		
	20. Congestion Relief Research and Development (T) [Non-add]	0	0	0	[25,000]
D.	University Transportation Research	60,033	60,033	69,700	69,700
	1. University Transportation Research (T)	60,033	60,033	69,700	69,700
E.	Other	148,681	162,701	165,723	171,939
	1. State Planning and Research (SPR) 1/	148,681	162,701	165,723	171,939
F.	Administrative Expenses	17,044	17,044	17,556	17,960
	Subtotal, Research and Development	346,568	360,587	392,634	410,041
	Subtotal, Technology Investment (T)	166,089	166,090	193,445	182,658
	Subtotal RD&T Programs	512,657	526,677	586,079 2/	592,699
	Add: Bureau of Transportation Statistics	26,730	26,730	27,000	27,000
	Less: Administrative Expenses	-17,044	-17,044	-17,556	-17,960
	Less: State Planning and Research (SPR)	-148,681	-162,701	-165,723	-171,939
	Total Title V Programs	373,662	373,662	429,800	429,800

Footnotes: 1/ Title 23 USC 505(b) requires State DOT's to expend no less than 25 percent of their annual SPR funds on RD&T activities. Total SPR funding represents 2 percent of apportioned programs e.g. Interstate Maintenance, National Highway System, Surface Transportation, etc. and other allocations to the States.

2/ FY 2007 Contract Authority amounts do not include Revenue Aligned Budget Authority (RABA) as proposed in the FY 2007 President's Budget.

EXHIBIT V-1.b

RESEARCH, DEVELOPMENT & TECHNOLOGY DEPARTMENT OF TRANSPORTATION

Obligation Limitation (in thousands of dollars)

EV 2007

				FY 2007	
FE	DERAL HIGHWAY ADMINISTRATION	FY 2006 <u>Oblim</u>	FY 2007 <u>CR Oblim</u>	PresBud Oblim (Est.)	FY 2008 <u>Oblim (Est.)</u>
Α.	Surface Transportation Research, Development, and Deployment Program	169,159	169,159	190,268	186,973
	1. Safety	7,003	7,003	8,037	7,129
	2. Safety (T)	5,729	5,729	6,576	5,832
	3. Pavements	17,563	17,563	19,515	19,828
	4. Pavements (T)	9,459	9,459	10,510	10,679
	5. Structures	11,775	11,775	14,061	13,379
	6. Structures (T)	9,635	9,635	11,504	10,947
	7. Policy	148	148	,	
	8. Policy (T)	64	64		
	9. Planning, Environment, and Realty	6,601	6,601	7,577	7,425
		9,902	9,902	11,365	11,137
	10. Planning, Environment, and Realty (T)			2.917	
	11. Highway Operations	2,542	2,542	7 -	2,986
	12. Highway Operations (T)	3,812	3,812	4,376	4,479
	13. Long-Term Pavement Performance	7,145	7,145	8,201	8,395
	14. International Outreach	0	0	243	248
	15. Exploratory Advanced Research	9,884	9,884	11,343	11,613
	Future Strategic Highway Research Program-SHRP II	36,184	36,184	41,529	42,514
	17. OST, RITA, FMCSA, NHTSA & PHMSA	14,165	14,165	17,219	16,090
	18. OST, RITA, FMCSA, NHTSA & PHMSA (T)	14,165	14,165	15,295	14,292
	19. Corporate Business	3,383	3,383		
_					
в.	Training and Education	22,997	22,997	25,866	25,418
	1. National Highway Institute (T)	7,984	7,984	8,980	8,825
	2. Local Technical Assistance Program (T)	9,232	9,232	10,384	10,204
	Eisenhower Transportation Fellowship Program (T)	1,829	1,829	2,058	2,022
	4. Garret Morgan Program (T)	1,040	1,040	1,169	1,149
	5. Transportation Education Development Pilot (T)	1,560	1,560	1,754	1,724
	6. Freight Planning Capacity Building (T)	728	728	819	804
	 Surface Transportation Relief Assistance Program (T) 	624	624	702	690
C.	Intelligent Transportation Systems	94,743	94,743	106,566	104,720
	1. Research	10,549	10,549	50,054	0
	2. Operational Test	1,479	1,479	11,307	0
	3. Integration (T)	656	656	10,816	0
	4. Vehicle Infrastructure Integration	27,340	27,340	0	21,134
	5. Integrated Vehicle Based Safety Systems	2,232	2,232	0	10,472
		5,470	5,470	0	18,088
	6. Cooperative Intersection Collision Avoidance Systems				
	7. Next Generation 911	3,750	3,750	0	1,904
	8. Integrated Corridor Management	3,075	3,075	0	11,424
	Emergency Management and Operations	350	350	0	4,094
	10. Mobility Services for All Americans	2,867	2,867	0	2,856
	11. Clarus	1,426	1,426	0	1,904
	12. Road Weather Research and Development	2,880	2,880	0	2,856
	13. I-95 (T)	6,029	6,029	0	6,664
	14 Architecture and Standards (T)	5,755	5,755	17,114	7,140
	15. Professional Capacity Building (T)	3,024	3,024	0	3,332
	16. Program Assessment (T)	6,330	6,330	6,458	6,664
	•				
	17. Outreach (T)	672	672	0	952
	18. ITS Program Support	3,030	3,030	10,816	5,236
	 ITS Program Support (T) Congestion Relief Research and Development (T) [Non-add] 	7,829	7,829		[25,000]
D.		60,033	60,033	67,524	
υ.	University Transportation Research				66,355
	1. University Transportation Research (T)	60,033	60,033	67,524	66,355
Ε.	Other	148,681	162,701	165,723	171,939
	1. State Planning and Research (SPR) 1/	148,681	162,701	165,723	171,939
F.	Administrative Expenses	17,044	17,044	17,556	17,960
	Subtotal, Research and Development	346,568	360,588	375,282	400,902
	Subtotal, Technology Investment (T)	166,089	166,089	198,221	172,463
	Subtotal RD&T Programs	512,657	526,677	573,503	573,365
	Add: Bureau of Transportation Statistics 2/	26,730	26,730	27,480	27,000
	Less: Administrative Expenses	-17,044	-17,044	-17,556	-17,960
	Less: State Planning and Research (SPR)	-148,681	-162,701	-165,723	-171,939
	Total Title V Programs	373,662	373,662		
г.		313,002	3/3,002	417,704	410,466

Footnotes:

1/ Title 23 USC 505(b) requires State DOT's to expend no less than 25 percent of their annual SPR funds on RD&T activities.

Total SPR funding represents 2 percent of apportioned programs e.g. Interstate Maintenance, National Highway System, Surface Transportation, etc. and other allocations to the States.

2/ The FY 2007 Obligation Limitation for Bureau of Transportation Statistics includes \$480K of additional obligation authority based on

Revenue Aligned Budget Authority (RABA) proposed in the FY 2007 President's Budget. Fiscal Year 2007 Obligation Limitation for all other programs include RABA

EXHIBIT V-2

FEDERAL HIGHWAY ADMINISTRATION FY 2008 RD&T Budget Request (\$000)

	FY 2008			Global			Org.
RD&T Program Surface Transp. Research, Developmt., and Deploymnt Prog.	Request 196,400		Congestion	Conn. 3,294	Environ. 22.514	Security 2,033	Excell. 4,082
Safety	13,614	36,009 13,614	128,468	3,294	22,314	2,033	4,002
Safety	7,488	7,488					
Safety (T)	6,126	6,126					
Pavements	32,045		32,045				
Pavements	20,828		20,828				
Pavements (T)	11,217		11,217				
Structures	25,553		25,553				
Structures	14,054		14,054				
Structures (T)	11,499	100	11,499	1 000	7 444		0.040
Planning, Environment, and Realty	19,497	100	8,937	1,000	7,411		2,049
Planning, Environment, and Realty Planning, Environment, and Realty (T)	7,799	40 60	3,575 5,362	400	2,964 4,447		820 1,229
Highway Operations	7,842	00	7,842	000	4,447		1,229
Highway Operations	3,137		3,137				
Highway Operations (T)	4,705		4,705				
Long-Term Pavement Performance	8,818		8,818				
International Outreach	261		0,010	261			
Exploratory Advanced Research	12,199	2,034	2,033	2,033	2,033	2,033	2,033
Future Strategic Highway Research Program-SHRP II	44,657	17,863	26,794	_,000	_,300	_,300	_,000
OST, RITA, FMCSA, NHTSA & PHMSA	31,914	2,398	16,446		13,070		
OST, RITA, FMCSA, NHTSA & PHMSA	16,901	1,270	8,709		6,922		
OST, RITA, FMCSA, NHTSA & PHMSA (T)	15,013	1,128	7,737		6,148		
Training and Education	26,700	8,000	9,339	0	2,000	500	6,861
National Highway Institute (T)	9,270	1,000	6,770		1,000	500	
Local Technical Assistance Program (T)	10,719	7,000	1,000		1,000		1,719
Eisenhower Transportation Fellowship Program (T)	2,124						2,124
Garret Morgan Program (T)	1,207						1,207
Transportation Education Development Pilot (T)	1,811						1,811
Freight Planning Capacity Building (T)	845		845				
Surface Transportation Relief Assistance Program (T)	724		724				
	440.000	00 740	40.000	0.000		-	
Intelligent Transportation Systems	110,000 22,200	60,710 12,200	46,290 10,000	3,000	0	0	0
Vehicle Infrastructure Integration Integrated Vehicle Based Safety Systems	11,000	12,200	10,000				
Cooperative Intersection Collision Avoidance System	19,000	19,000					
Next Generation 911	2,000	2,000					
Integrated Corridor Management	12,000	2,000	12,000				
Emergency Management and Operations	4,300		4,300				
Mobility Services for All Americans	3,000		3,000				
Clarus	2,000	500	1,500				
Road Weather Research and Development	3,000	1,000	2,000				
I-95 (T)	7,000	1,000	4,000	2,000			
Architecture and Standards (T)	7,500	4,300	3,000	200			
Professional Capacity Building (T)	3,500	2,030	1,390	80			
Program Assessment (T)	7,000	4,100	2,700	200			
Outreach (T)	1,000	580	400	20			
ITS Program Support	5,500	3,000	2,000	500			
Congestion Relief Research and Development (T) [Non-add program]	[25,000]		[25,000]				
University Transportation Research	69,700	0	,	0	0	0	0
University Transportation Research (T)	69,700		69,700				
Duranu of Transmortian Statistics (DTO)	07.000		-				07 000
Bureau of Transportion Statistics (BTS)	27,000	0	0	0	0	0	27,000
Bureau of Transportation Statistics	27,000						27,000
Other	171,939	0	171,939	0	0	0	0
State Planning and Research (SPR)	171,939		171,939		J		0
	111,309	-	111,308				
Administrative Expenses	17,960						17,960
Subtotal P2D	440.044	77 205	204 607	2 40 4	11.010	2 0 2 2	20.040
Subtotal, R&D	410,041	77,395 27,324	294,687	3,194	11,919	2,033	20,813
Subtotal, Technology Investment (T) Subtotal RD&T Programs	<u>182,658</u> 592,699		<u>131,049</u>	<u>3,100</u>	<u>12,595</u> 24,514	<u>500</u>	8,090
	592,099	104,719	425,736	6,294	24,514	2,533	28,903
Add: Bureau of Transportation Statistics	27,000						27,000
Less: Administrative Expenses	-17,960						-17,960
			174 000				17,300
Less: State Planning and Research (SPR)	-171,939		-171,939				

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Federal Highway Administration

Research Program Summary

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: SAFETY **AMOUNT REQUESTED FOR FY 2008:** \$13,614,000

Projects

Safety Research and Innovation Deployment Program

Objective: Demonstrate the application of innovative technologies in highway safety.

<u>Description</u>: Demonstrate the application of innovative technologies in highway safety and support the deployment and evaluation of safety technologies and innovations at the state and local levels. In this research area, efforts will include the deployment of best practices in safety training and management.

Outputs:

- Evaluate the effectiveness of various safety improvements in support of State Strategic Highway Safety Plans
- Implementation of core Highway Safety Improvement Program (HSIP)
- Develop guidance on location and installation of roadside barriers
- Develop guidelines for novel intersection treatments
- Updated handbook for highway rail grade crossing
- Conduct studies on the impacts of traffic calming on pedestrian and bicyclist safety
- Develop countermeasures to keep vehicles on the road to reduce the severity of crashes when motorists depart the lane or road
- Knowledge gained on human factor issues associated with use of the Highway Driving Simulator or Field Research Vehicle
- Reports on how human-centered system considerations are affected by innovative infrastructure highway designs
- Reports and products to assist states, locals, and industry in assessing safety implications
- Reports from studies using Highway Safety Information System data
- Intersection Violation Warning System prototype and field test
- Intersection Gap Acceptance prototype and field test
- Improved safety analysis methods for highway intersections
- Study of the effectiveness of innovative intersection designs
- Safety analysis methods for freeway interchanges
- Driver performance requirements for traffic control devices
- Highway visibility model
- Specifications for a Digital Highway Measurement System that records roadway data at state-of-the-art precision levels
- Evaluation of alternative highway safety countermeasures for priority treatments decided by the states
- Finite element models of new vehicle design and roadside hardware to assess vehicle crashworthiness into roadside hardware

FY 2008 Funding: \$11,110,000

Center for Surface Transportation Safety

<u>Objective</u>: Develops and disseminates advanced transportation safety techniques and innovations in both rural areas and urban communities.

<u>Description</u>: The center will use a controlled access highway with state-of-the-art features to test safety devices and techniques that enhance driver performance, to examine advanced pavement and lighting systems, and to develop techniques to address older driver and fatigue issues.

Outputs:

- Knowledge gained on vehicle-based approach to safety devices to enhance driver performance
- Knowledge gained on infrastructure-based approach to safety devices to enhance driver performance
- Reports and guidelines on safety devices and techniques that result in improved safety, especially with regard to a reduction in the number and rate of fatal run-off-road crashes on two-lane rural roads
- Knowledge gained on roadway lighting parameters that have the highest correlation to reductions in crash rate and severity
- Knowledge gained on driver visual requirements for detection of objects and pedestrians on and along the roadway
- Development of practical metric and design methods for roadway lighting
- Reports and guidelines on appropriate delineation requirements for various road classes
- Knowledge gained regarding age-related impacts on driving performance
- Reports on skill acquisition and errors in judgment by younger drivers
- Reports on errors in perception and skill degradation among older drivers
- Reports and recommendations on on-road sleeping patterns and safety effects for commercial motor vehicle operators
- Evaluation of the safety impact of the August 2005 FMCSA Hours of Service rule for commercial vehicle drivers

FY 2008 Funding: \$654,000

Center for Excellence in Rural Safety

<u>Objective</u>: Provides research, training, and outreach on innovative uses of technology to enhance rural safety and economic development, assess local community needs, and improve access to mobile emergency treatment.

<u>Description</u>: Among other activities, the program will address the online and seminar training needs of rural transportation practitioners and policy makers.

Outputs:

- Strategic partnerships with key stakeholder groups in order to leverage related activities on rural safety
- Knowledge gained through research on technological, policy, behavior, and educational issues related to rural transportation safety

- Development and deployment of training and outreach to advance innovative uses of technology, policy, and best practices to enhance rural safety and economic development to rural transportation practitioners and policy makers
- Creation and utilization of both traditional and innovative outreach mechanisms, which may include safety circuit rider program, streaming video, on-demand training library, web-based training, as well as other educational activities suited to improving rural safety and economic development

FY 2008 Funding: \$761,000

Transportation Injury Research

<u>Objective</u>: Supports the Center for Transportation Injury Research at the Calspan University of Buffalo, New York.

<u>Description</u>: This Center will perform interdisciplinary, systems-oriented research to reduce the occurrence, severity, and consequences of crash-related injuries.

Outputs:

- Knowledge gained on the statistics of rare events as it applies to highway safety
- In-depth assessment of the benefits from the roadside safety hardware certification process relative to injuries observed in crashes
- Improvement methods for medical transport services at highway crashes
- Review of structural safety issues for truck-tractor designers relative to driver safety improvements

FY 2008 Funding: \$1,089,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: PAVEMENTS **AMOUNT REQUESTED FOR FY 2008:** \$32,045,000

Projects

Innovative Pavement Research and Deployment

<u>Objective</u>: Researches, develops, demonstrates, promotes, supports, and documents the application of innovative pavement technologies, specifications and test methods, and practices.

<u>Description</u>: Activities will include the development and deployment of new, cost-effective, and innovative designs, materials, and practices to extend pavement life and performance; promotion and use of improved engineering design criteria and specifications; and use of accelerated construction techniques to increase safety and reduce construction time.

Outputs:

- Develop and implement quality assurance technologies
- Guidance for minimizing moisture damage in asphalt pavements
- Guidance for the use of modifiers and additives in asphalt paving
- Improved computer-based guidance for concrete paving

- Enhanced quality systems for highway paving
- Information and component models for "next generation" performance prediction
- Automated testing equipment for concrete coefficient of thermal expansion
- Aggregate models for optimization of concrete paving mixes
- Guidance for optimizing pavement surface characteristics
- Concrete paving mixture thermal tests for analysis of plastic and hardened concrete
- Develop and deploy improved material technologies
- Identify and implement material recycling technologies
- Improved material selection and design systems
- Guidance for optimization of pavement surface characteristics
- Methods to quantify construction variability and effects on performance

<u>FY 2008 Funding</u>: \$19,715,000

Alkali-Silica Reactivity (ASR)

<u>Objective</u>: Development and deployment of techniques to prevent and mitigate alkali silica reactivity.

<u>Description</u>: Conducts research and implements technologies to address the problem of cracking and eventual failure of concrete in bridges, pavements, and other structures due to silica and alkali reaction in Portland cement.

Outputs:

• Guidance for reducing the effects of ASR on new and existing structures and pavements

FY 2008 Funding: \$2,135,000

Fundamental Properties of Asphalts and Modified Asphalts

<u>Objective</u>: Promote innovative technologies that will improve pavement durability, extend service life, and help reduce costs.

<u>Description</u>: Among some of the research topics to be pursued are the development of the chemical/molecular model of asphalt, and the determination of the molecular and microstructural bases of asphalt and mix rheology and of pavement performance in general. Western Research Institute (WRI) will continue pinning down the fundamental mechanisms of oxidation and developing the fundamental mechanisms of fatigue cracking.

Outputs:

- Link mechanical/ engineering properties of mix and its individual constituents qualitatively or, better, semi-quantitatively to the fundamental chemical/ molecular properties of the mix components, including the effects of moisture and oxidation
- Develop an engineering performance prediction model of asphalt pavement that relates engineering properties to chemical/molecular parameters
- Explain specific embodiments of warm mix asphalt (WMA) and its enhanced properties with respect to regular hot mix asphalt (HMA) in terms of the fundamental science involved

- Validate the effects of the fundamental properties of asphalts on pavement performance using real pavement test sites where sections to be compared differ solely in chemical compositions of the asphalt binders used
- Develop equations for the empirical parameters used in performance models of asphalt and of mix in terms of chemical/molecular properties of different asphalt binders used
- Transfer fundamental science/technology developed to the practical world of the asphalt highway paving industry
- Develop improved chemical and physicochemical methods to enhance the characterization and performance prediction of modified asphalts
- Develop chemical/molecular understanding of aggregate surfaces and their effects on mix performance to the level of our current understanding of analogous properties of chemically different asphalts and their differential effects on pavement performance

FY 2008 Funding: \$3,660,000

Asphalt Research Consortium

Objective: Conduct research in flexible pavements and on extending the life cycle of asphalt.

<u>Description</u>: This research consortium will be led by the Western Research Institute (WRI) in Laramie, Wyoming.

Outputs:

- Validation and calibration of findings of the fundamental properties of asphalt (Fundamental Contract) which impact performance using mixture testing and pavement test sites
- Advance promising products, processes, and models through further research development, testing, and evaluation
- New technological capabilities to increase pavement durability, performance, and reduce life cycle cost
- Evaluation of pavement surface characteristics for improving condition and ride quality of pavements for users
- Enhanced knowledge of and new models on vehicle-pavement interactions as they relate to noise and friction
- Identification of mechanism of action for polyphosphoric acid as an asphalt binder modifier as well as its potential beneficial and deleterious effects
- Comprehensive technology transfer and training program for Agreement products

<u>FY 2008 Funding</u>: \$6,535,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: STRUCTURES **AMOUNT REQUESTED FOR FY 2008:** \$25,553,000

Projects

Seismic Research

<u>Objective</u>: Study the vulnerability and improve the resiliency of the Nation's bridges and highways to seismic activity.

<u>Description</u>: The program will develop and implement cost-effective methods to reduce vulnerabilities and economic loss through the conduct of seismic research. Upgrades will be made to earthquake simulation facilities, as necessary, to carry out the program.

Outputs:

- Design details to accommodate seismic behavior and design of prefabricated segmental bridge piers for accelerated bridge construction in seismic regions
- Design criteria for protection of bridges against earthquakes and other hazards
- Implement improved earthquake loss estimation technology

FY 2008 Funding: \$2,178,000

Long-Term Bridge Performance

<u>Objective</u>: Provide quality data on the performance of in-service highway bridges regularly inspected and monitored over a period of 20 years.

<u>Description</u>: Highway agencies will use this data to make informed decisions on all aspects of bridge design and construction of bridges, and in making asset management decisions regarding maintenance, repair, and rehabilitation in order to meet future needs.

Outputs:

- Research quality data on the performance of highway bridges under a range of exposures and loadings
- Research quality data that can be used to assess the effectiveness of maintenance approaches and strategies
- Standards and protocols for the collection and dissemination of bridge performance data in order to unify activities both nationally and globally
- A collateral output is expected to be significant improvements in sensor technologies and systems for assessing and monitoring the performance and "health" of bridges and structures

FY 2008 Funding: \$6,753,000

Innovative Bridge Research and Deployment

<u>Objective</u>: Promote, demonstrate, evaluate, and document the application of innovative designs, materials, and construction methods in the construction, repair, and rehabilitation of bridges and other highway structures.

<u>Description</u>: Program activities will include research, deployment, and education in support of innovative approaches and technologies that will significantly improve design methodologies, accelerate and improve the quality of construction, and result in higher levels of durability and resilience for highway structures. In addition, the program will have a major component focused on extending high-performance concrete bridge technology.

Outputs:

- Revisions to AASHTO bridge design and materials specifications and standards
- Demonstration and evaluation of improved bridge design and construction practices
- Development, demonstration and evaluation of technologies and approaches that will result in significantly higher resilience against natural hazards and other extreme events

FY 2008 Funding: \$11,415,000

High-Performing Steel Bridge

<u>Objective</u>: Demonstrate the application of high-performing steel in the construction and rehabilitation of bridges.

<u>Description</u>: Program activities will include research, deployment, and education in support of innovative approaches and technologies that will significantly improve design methodologies, accelerate and improve the quality of construction, and result in higher levels of durability and resilience for steel highway bridges.

Outputs:

- Revisions to AASHTO bridge design and materials specifications and standards
- Development of improved bridge design, fabrication, and construction/erection practices and technologies
- Modern fracture control plan to guide fabrication and maintenance of bridge structures
- Designers guide for efficient use of high-performance steel

FY 2008 Funding: \$3,573,000

Steel Bridge Testing

<u>Objective</u>: Yields new information on the testing of steel bridges using nondestructive technology.

<u>Description</u>: Program activities will focus on the development or improvement of nondestructive testing technologies that are able to detect fatigue and other cracks in steel bridges and other structures, and to effectively demonstrate and deploy these technologies in the field.

Outputs:

• Improved technology for detecting cracks in steel bridges and other structures

FY 2008 Funding: \$1,089,000

Ultra-high-performance Concrete Demonstrations

<u>Objective</u>: Demonstrate the use of a steel-fiber-reinforced reactive powder concrete (known as Ultra-High Performance Concrete – UHPC) which has more than twice the compressive strength of concrete used in typical bridge and structural applications.

<u>Description</u>: This work will result in improved material characterization and recommendations regarding the efficient use of this high performance, but expensive, structural material in appropriate bridge applications. The research is likely to drive important new innovations in bridge design and construction practices.

Outputs:

- Quantify material properties for use in design and long-term field applications
- Develop optimized recast UHPC bridge deck and other bridge systems
- Design provisions and examples compatible with AASHTO specifications

FY 2008 Funding: \$545,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: PLANNING, ENVIRONMENT, AND REALTY **AMOUNT REQUESTED FOR FY 2008:** \$19,497,000

Projects

Transportation, Economics, and Land Use System (TELUS)

<u>Objective</u>: Helps Metropolitan Planning Organizations (MPOs) and state DOTs develop their transportation improvement programs and carry out other transportation planning responsibilities.

<u>Description</u>: A fully integrated information management and decision support system, TELUS will help states and MPOs assure public participation in the transportation planning process.

Outputs:

• Utilize TELUS to assist States and MPOs in the development of transportation improvement programs and other transportation planning initiatives

FY 2008 Funding: \$872,000

Surface Transportation Environment and Planning Cooperative Research Program

<u>Objective</u>: Improve understanding of the complex relationship between surface transportation and the environment.

<u>Description</u>: Among other efforts, the program will support research to understand the impacts of transportation activities on the natural and built environment and communities and to advance technologies and concepts to mitigate those impacts.

Outputs:

• Improve state of the practice regarding the impact of transportation on the environment

<u>FY 2008 Funding</u>: \$14,704,000

Center for Environmental Excellence

<u>Objective</u>: Assist states in planning and delivering environmentally sound surface transportation projects.

<u>Description</u>: The center will provide technical assistance, information on best practices, and training in the use of tools and decision-making processes.

Outputs:

- Conduct research to promote environmental streamlining/stewardship
- Advance Context Sensitive Solutions
- Identify and promote technology and geospatial innovations
- Conduct problem solving sessions on Federal environmental legislation, policies and procedures
- Conduct workshops on implementing SAFETEA-LU Environmental Review Process provisions
- Transfer knowledge to environment and transportation professionals
- Develop case studies and best practices
- Promote good practices through awards

<u>FY 2008 Funding</u>: \$1,089,000

Center for Transportation Advancement and Regional Development

<u>Objective</u>: Assist in the development of small metropolitan and rural regional transportation systems that are responsive to the needs of businesses and local communities.

<u>Description</u>: Focusing on training, education, and research geared toward developing small metropolitan and rural regional transportation systems, the center will promote the use of innovative strategies to expand the capabilities, capacity, and effectiveness of regional transportation networks, including activities related to freight projects, transit system upgrades, roadways, bridges, and intermodal facilities.

Outputs:

- Improved knowledge of transportation and economic development
- Transfer knowledge to economic development and transportation professionals

FY 2008 Funding: \$545,000

Advanced Travel Forecasting Procedures Program

<u>Objective</u>: Continues deployment of the Transportation Analysis Simulation System (TRANSIMS) as a planning tool.

<u>Description</u>: The program will develop additional applications and uses of the TRANSIMS model.

Outputs:

- Demonstrate mode-split procedures combining highway, transit, and non-motorized modes for tracking and simulating travelers on a second-by-second basis
- Use multiprocessor and 64-bit computer technology to simulate movements of vehicles and persons for entire regions
- Use simulation technologies to understand the impact of operational improvements on the demand for travel

FY 2008 Funding: \$2,287,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: HIGHWAY OPERATIONS **AMOUNT REQUESTED FOR FY 2008:** \$7,842,000

Projects

Surface Transportation Congestion Relief Solutions

<u>Objective</u>: Develops information to assist state transportation departments and Metropolitan Planning Organizations (MPOs) in measuring and addressing surface transportation congestion problems.

<u>Description</u>: The program will consist of two independent research programs: Improved Transportation Congestion Management System Measures and Analytical Techniques for Action on Surface Transportation Congestion. Further, initiatives to address non-recurring congestion will focus on reducing the time required to restore traffic flow to "normal" conditions following minor traffic incidents and minimizing the impact of work zones on motorist mobility.

Outputs:

- The national summary report for the traffic incident management self assessment; activities to foster partnerships and advance the state of the practice; supporting the towing and recovery certification through outreach to law enforcement agencies; develop effective technical guidance and training in traffic control at highway incidents in accordance with the Manual on Uniform Traffic Control Devices
- Provide guidance materials and tools to decision makers and senior officials who need to be familiar with the value of regional coordination and collaboration to ensure the success of planned special events
- Support the congestion mitigation with a comprehensive work zone tools. The tools assist State DOTs in evaluating their existing work zone management practices and identifying areas for potential improvement; develop guidance on work zone safety; foster using Intelligent Transportation Systems (ITS) in work zones
- Provide training on the principles and tools for road weather management by providing transportation decisions makers the basics behind road weather management and the

ways that various road weather management strategies can be applied to resolve a host of weather-related problems

• Develop regional frameworks for the integrated deployment of intelligent transportation systems technology; traffic conditions monitoring; computerized traffic control systems; traveler information systems, and public transit information management systems

FY 2008 Funding: \$7,842,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: LONG-TERM PAVEMENT PERFORMANCE **AMOUNT REQUESTED FOR FY 2008:** \$8,818,000

Projects

Long-Term Pavement Performance

Objective: Provide answers to "how" and "why" pavements perform as they do.

<u>Description</u>: The program will continue to gather and process data describing the structure, service conditions, and performance of more than 2,400 pavement test sections in North America for use by highway engineers in making decisions leading to more cost-effective and better performing pavements.

Outputs:

- Develop database and supporting documentation
- Develop and implement quality assurance technologies

FY 2008 Funding: \$8,818,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: INTERNATIONAL OUTREACH **AMOUNT REQUESTED FOR FY 2008:** \$261,000

Projects:

International Highway Transportation Outreach Program

<u>Objective</u>: Informs the U.S. highway community of technological innovations in foreign countries and promotes U.S. highway transportation expertise, goods, and services.

<u>Description</u>: The program will help to increase transfers of U.S.-developed highway technologies to foreign countries, as well as leverage best practices and technologies already developed in foreign countries.

Outputs:

- International Scanning Program scans, reports and pilot projects, resulting in the adaptation of foreign technologies and best practices for use in the U.S.
- Opportunities developed for US private sector companies through technology exchange and technical assistance

FY 2008 Funding: \$261,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: EXPLORATORY ADVANCED RESEARCH **AMOUNT REQUESTED FOR FY 2008:** \$12,199,000

Projects

Exploratory Advanced Research

<u>Objective</u>: Addresses longer-term, higher-risk research with potentially dramatic breakthroughs for improving the durability, efficiency, environmental impact, productivity, and safety (including bicycle and pedestrian safety) aspects of highway and intermodal transportation systems.

<u>Description</u>: The program will focus on obtaining information from the very large number of basic and advanced research and development resources and activities outside of the highway R&D community for possible exploitation, adaptation and eventual application to the highway industry.

Outputs:

- Laser shearography system for detection of cracks in concrete
- Nuclear system for nondestructive measurement of chlorides in concrete
- Fiber optic sensor for internal relative humidity of concrete
- Guidelines for preventing delayed ettringite formation in concrete
- Improved classification system for fly ash in concrete
- Guidelines for controlling strong chaotic motions in cable-stayed bridges
- Recommendations for use of retarders to control set of concrete

FY 2008 Funding: \$12,199,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: FUTURE STRATEGIC HIGHWAY RESEARCH PROGRAM-SHRP II

AMOUNT REQUESTED FOR FY 2008: \$44,657,000

Projects

Future Strategic Highway Research Program (SHRP II)

Objective: Conduct concentrated, results-oriented applied research focusing on solving the top problems in the area of highway safety, reliability, capacity, and renewal.

Description: The program will be carried out by the Transportation Research Board of the National Academy of Sciences in consultation with the American Association of State Highway and Transportation Officials. The research program shall include an analysis of the following: (A) Renewal of aging highway infrastructure with minimal impact to users of the facilities, (B) Driving behavior and likely crash causal factors to support improved countermeasures. (C) Reducing highway congestion due to nonrecurring congestion, and (D) Planning and designing new road capacity to meet mobility, economic, environmental, and community needs.

Outputs:

- Research to develop a consistent, systematic approach to performing highway renewal • that is rapid, causes minimum disruption, and produces long-lived facilities
- Research is to prevent or reduce the severity of highway crashes through more accurate • knowledge of crash factors and of the effectiveness of selected countermeasures in addressing these factors
- Research on methods to provide highway users with reliable travel times by preventing • and reducing the impact of nonrecurring incidents
- Research to develop approaches and tools for systematically integrating environmental, • economic, and community requirements into the analysis, planning, and design of new highway capacity

FY 2008 Funding: \$44,657,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: U.S. DOT PARTNER ADMINISTRATIONS (OST, RITA, FMCSA, NHTSA & PHMSA) AMOUNT REQUESTED FOR FY 2008: \$31,914,000

Projects

Center for Excellence in Project Finance

Objective: To promote and support strategic national surface transportation programs and activities relating to the work of state DOTs in project finance.

<u>Description</u>: The center will develop and offer training in state-of-the-art financing methods and support state DOTs in the development of project finance plans through an FHWA-funded procurement managed by OST.

Outputs:

- Training courses for state DOTs and others in state-of-the-art project finance
- Support to state DOTs in the development of finance plans

FY 2008 Funding: \$762,000

National Cooperative Freight Transportation Research Program (NCFRP)

<u>Objective</u>: Awards contracts and grants for research on critical freight transportation issues through an FHWA-funded program administered by the National Research Council.

<u>Description</u>: Among other topics, the program will address techniques for estimating the public benefits of freight transportation projects, approaches for calculating the contribution of truck and rail traffic to congestion, use of technology to increase the capacity of truck-only highway lanes, and freight transportation research needs in all modes. Program is being administered by RITA in cooperation with OST.

Outputs:

- Formation and administration of an Oversight Committee from a diverse group of freight stakeholders
- Review of the research needs that are solicited from freight shippers and carriers, industry associations, departments of transportation and other interested entities
- Identification of key freight transportation topical areas Transportation issues
- Evaluating and selecting topics for research under the NCFRP
- Research in critical freight transportation issues to improve planning, operations and infrastructure of freight systems
- Setting project priorities and recommending funding levels
- Evaluating program effectiveness

<u>FY 2008 Funding</u>: \$3,268,000

Biobased Transportation Research

<u>Objective</u>: Supports biobased transportation research of national importance at the National Biodiesel Board and at various research centers identified in the Farm Security and Rural Investment Act of 2002.

<u>Description</u>: This grant will be managed by RITA and funded by the FHWA. As authorized in SAFETEA-LU (P.L. 109-59) Section 5201(m) and delegated by the Secretary, RITA has responsibility for carrying out biobased research of national importance at the National Biodiesel Board and at research centers identified in section 9011 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8109).

The Biobased Transportation Research Program will enter its third year in FY 2008. Funding in FY 2008 will allow grantees to continue projects initiated in FYs 2006 and 2007. These multiyear projects were selected by DOT through a competitive, peer-reviewed process in FY 2006. RITA manages the research projects, which focus on biobased research, product development and demonstration with an emphasis on transportation applications. The regional research centers include Cornell University, University of Tennessee, South Dakota State University, Oklahoma State University and Oregon State University.

Outputs:

- The program will continue engine testing of biofuels for compatibility with new and emerging exhaust after treatment technologies. Preliminary and final results will be published
- The program will continue to finalize and publish a published national fuel specification standard for biodiesel blends
- The program will continue focused research projects to improve the energy efficiency of producing biofuels with a particular focus on cellulosic ethanol

<u>FY 2008 Funding</u>: \$10,892,000

Commercial Remote Sensing Products and Spatial Technologies

<u>Objective</u>: Develops new applications of commercial remote sensing and spatial information technologies for national infrastructure development and construction

<u>Description</u>: This program, which will be managed by RITA and funded by the FHWA, will establish a national policy and implement initiatives for validating application of these technologies in cooperation with consortia of university research centers, industry and state agencies.

Outputs:

- New methods for monitoring the quality of infrastructure construction and condition assessment
- Application of space based technology tools for freight flow management and congestion mitigation
- New and faster methods of collecting data for corridor planning and environmental impact assessment

<u>FY 2008 Funding</u>: \$6,753,000

Technology Transfer Grant

<u>Objective</u>: Support the development and testing of technology solutions that will improve the Nation's transportation system.

<u>Description</u>: The center will conduct research and demonstration projects leading to the exchange of research results with the private sector and universities. This project will be managed by RITA.

Outputs:

- Application of advanced computing to one or more complex transportation problems
- Simulations of emergency response scenarios
- Tools for conducting analyses of complex datasets

<u>FY 2008 Funding</u>: \$3,485,000

Automobile Accident Injury Research

<u>Objective</u>: Support research and technology to prevent and minimize head, craniofacial, and spinal cord injuries resulting from automobile crashes.

<u>Description</u>: This research will be conducted by the Forsyth Institute under a grant managed by NHTSA and funded by the FHWA.

Outputs:

- An understanding of the methods of tissue regeneration in model species such as planaria, frogs, and axolots
- Methodology to control cell behavior using biophysical signals
- An understanding of the potential for cell and tissue regeneration to minimize the effects of and aid in the healing of injuries resulting from automobile crashes

FY 2008 Funding: \$436,000

Rural Transportation Research Initiative

<u>Objective</u>: Supports research on rural transportation issues at North Dakota State University's Upper Great Plains Transportation Institute.

Description: Research will be carried out through a cost-shared FHWA grant managed by RITA.

Outputs:

- Establish a transportation building as a hub for transportation research, education, technology transfer, and outreach at North Dakota State University
- The new transportation building will unite all UGPTI programs, currently housed in fragmented space in three buildings. Planned major functions include: Learning, Research and Technology Transfer

FY 2008 Funding: \$436,000

Hydrogen-Powered Transportation Research Initiative

<u>Objective</u>: Support a hydrogen-powered transportation research initiative at the University of Montana.

<u>Description</u>: RITA will manage this grant, which is funded through the FHWA's RD&T program.

Outputs:

- Hydrogen Safety Training: After working with other agencies and higher education institutions, the program will continue with the collaborative distribution and update of materials and provide hydrogen safety training in the Hydrogen Safety Training Center
- Hydrogen Mobility: This phase of the research of a hydrogen-powered, magnetic levitation monorail system will identify methods to integrate hydrogen distribution and

storage for the system, incorporate the switching technology into the guideway system, construct a 100 foot guideway with spur, and hang a vehicle for testing

• Hydrogen Production: This research will continue to work with palladium membrane development by improving the palladium composition, its substrate, researching application techniques, and attach fixtures for production scale testing

FY 2008 Funding: \$655,000

Cold Region and Rural Transportation Research

<u>Objective</u>: Support the development of a research facility for basic and applied research on surface transportation issues facing rural and cold regions.

<u>Description</u>: RITA will manage an FHWA-funded grant to the Western Transportation Institute at Montana State University to establish the facility in Lewiston, Montana.

Outputs:

- Phase I: Planning and Initial Project Deployment
- Phase II: Design/Building Research Infrastructure and Evaluate Research Projects
- Phase III: Ensuring Long Term Sustainability of Lewiston Research Facility

FY 2008 Funding: \$871,000

Advanced Vehicle Technology

<u>Objective</u>: Support research and development of advanced vehicle technology concepts at the University of Kansas Transportation Research Institute.

<u>Description</u>: Research will focus on technologies related to vehicle emissions, fuel cells and catalytic processes, and intelligent transportation systems. This project will be managed by RITA.

Outputs:

- Prepare a report of activities conducted under each of the main research areas currently identified in the Transportation Research Institute
- Prepare a descriptive evaluation of the Transportation Research Institute's research framework, and, if new elements are deemed appropriate for further growth of the Institute, prepare a plan that will address the findings contained in the evaluation
- Prepare a description of new research areas that are emerging nationally and internationally, and which should be incorporated into the Transportation Research Institute's endeavors
- Prepare a strategic plan for the implementation, should new research areas be identified

FY 2008 Funding: \$2,178,000

Motor Carrier Efficiency Study

<u>Objective</u>: Identify inefficiencies in freight transportation and evaluate the safety, productivity, and cost reductions that may be achieved through the use of wireless technologies.

<u>Description</u>: The program will first identify freight inefficiencies and evaluate the safety and productivity effectiveness of promising wireless technologies in addressing these inefficiencies. Secondly, the program will demonstrate and test the most effective wireless technologies in the areas of fuel monitoring and management systems, radio frequency identification technology, electronic manifest systems, cargo theft prevention systems, and roadside safety inspection systems. The program will be conducted in coordination with the motor carrier and wireless technology industries. This effort will be managed by FMCSA with a multi-modal USDOT management team consisting of FHWA (freight and policy offices), OST (freight office), and RITA/BTS.

Outputs:

- Freight study report documenting the safety and productivity benefits of wireless technologies at addressing inefficiencies in the surface transportation supply chain
- Results from wireless technology field operational tests

FY 2008 Funding: \$1,089,000

Hazardous Materials Research Projects

<u>Objective</u>: Carry out the nine research projects called for in the 2005 Special Report 283 of the Transportation Research Board entitled, "Cooperative Research for Hazardous Materials Transportation: Defining the Need, Converging on Solutions."

<u>Description</u>: This research will be carried out by the Transportation Research Board (TRB) of the National Academy of Sciences and will be managed by PHMSA. Specific research will be conducted while testing the concept of a cooperative hazardous materials transportation research program.

Outputs:

- Completed research projects in nine areas affecting hazardous materials transportation safety and security as identified in Special Report 283 and as prioritized and further defined by a stakeholder committee established through the TRB
- Basis for determining the viability of a longer-term cooperative hazardous materials transportation research program

FY 2008 Funding: \$1,089,000

RD&T PROGRAM: TRAINING AND EDUCATION **AMOUNT REQUESTED FOR FY 2008:** \$26,700,000

Projects

National Highway Institute (NHI)

Objective: Provide leadership and resources for the development and delivery of training and education programs to improve the quality of our highway system and its intermodal connections.

Description: Established in 1970, the NHI will continue to provide training, resource materials, and educational opportunities to the surface transportation community to develop both core competencies and new skills.

Outputs:

- Train the current and future transportation workforce
- Transfer knowledge quickly and effectively to and among transportation professionals
- Address the full life cycle of the highway transportation system

FY 2008 Funding: \$9,270,000

Local Technical Assistance Program

<u>Objective</u>: Foster a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing the knowledge of the transportation workforce and decision makers through training, technology transfer, and information exchange activities.

<u>Description</u>: The program will continue to support 57 LTAP centers serving each state, Puerto Rico, and American Indian tribal government.

Outputs:

- Transfer and manage funds to the 58 LTAP and TTAP Centers across the nation
- Develop and release specific national training products and tools on behalf of Centers
- Develop, implement and continually assess strategic and management planning for Program
- Report performance-based data on Program performance annually

FY 2008 Funding: \$10,719,000

Eisenhower Transportation Fellowship Program

<u>Objective</u>: Attract qualified students to the field of transportation education and research, and advance transportation workforce development to help upgrade the scope of knowledge of the entire transportation community in the United States.

<u>Description</u>: Encompassing all transportation modes, the program will award fellowships based on applicants' academic achievements, recommendations, and likelihood of pursuing a career in transportation

Outputs:

- Distribute funds in support of university students continuing with post graduate studies in transportation
- Track and monitor progress of grantees in transportation related fields

FY 2008 Funding: \$2,124,000

Garrett A. Morgan Technology and Transportation Education Program

<u>Objective</u>: To prepare the workforce for the 21st century by improving the preparation of students -- particularly women and minorities -- in science, technology, engineering, and mathematics.

<u>Description</u>: The program will award grants to state and local educational agencies for internships, curriculum development, and other activities related to transportation.

Outputs:

- Manage grant programs that provide for transportation career awareness and preparation
- Enhance coordination throughout the education and transportation communities for career awareness and development

<u>FY 2008 Funding</u>: \$1,207,000

Transportation Education Development Pilot Program

Objective: Train individuals at all educational levels for careers in transportation.

<u>Description</u>: This pilot program will focus on curriculum development for in-service professional development programs.

Outputs:

- Manage grant programs that provide for transportation career awareness and preparation
- Enhance coordination throughout the education and transportation communities for career awareness and development issues

<u>FY 2008 Funding</u>: \$1,811,000

Freight Planning Capacity Building

<u>Objective</u>: Support research, training, and education in freight planning at the state and local levels.

<u>Description</u>: Among other activities, the program will identify and disseminate best practices in freight planning; provide opportunities for freight transportation staff to engage in peer exchange; refine data and analysis tools used to assess freight transportation needs; and facilitate relationships between governmental and private entities.

Outputs:

• Courses and workshops that improve freight professional capacity

FY 2008 Funding: \$845,000

Surface Transportation Congestion Relief Solutions Assistance and Training

<u>Objective</u>: Offer technical assistance and training to state and local transportation agencies.

<u>Description</u>: The program will work with agencies to improve their approaches to surface transportation congestion measurement, analysis, and project programming.

Outputs:

• Offer technical assistance and training to state and local transportation agencies to improve their approaches to surface transportation congestion measurement, analysis, and project programming

FY 2008 Funding: \$724,000

RD&T PROGRAM: INTELLIGENT TRANSPORTATION SYSTEMS (ITS) **AMOUNT REQUESTED FOR FY 2008:** \$110 M

Projects

Vehicle Infrastructure Integration –VII

<u>Objective:</u> To deploy a nationwide vehicle to vehicle and vehicle to roadside communication infrastructure that will enable a wide range of safety, mobility, and commercial applications

<u>Description:</u> The VII program is designed to demonstrate the technical, and institutional viability of the VII concept. A prototype system will be developed and tested in cooperation with all the major auto manufacturers. A "proof of concept" test will be conducted in the Detroit area. This test will validate the VII concept for the auto industry and assure that a nationwide network of infrastructure communications is viable. In addition the program will address the institutional issues of protecting privacy; how the infrastructure will be deployed; the long-term operation and maintenance of the infrastructure; and other implementation issues.

Outputs:

- Proof of the technical viability of the VII concept
- Proof that the privacy of the public can be ensured
- Proof that the security of the system is assured
- A plan for the nationwide deployment of the infrastructure
- A benefit cost analysis to justify this major public investment
- A business case analysis by the auto industry to justify installation of the VII equipment as standard equipment on all vehicles
- The development of safety applications that will prevent certain crash types
- The development of mobility applications that will improve the efficiency of the transportation system

FY 2008 Funding: \$22,200,000

Integrated Vehicle Based Safety Systems (IVBSS)

<u>Objective</u>: To accelerate introduction of Vehicle-Based Safety Systems (IVBSS) that integrate rear-end, lane-change and roadway departure crash avoidance warning systems into the U.S. vehicle fleet. These three crash types account for approximately 3.6 million police-reported crashes each year and result in 27,500 of the 42,000 fatal crashes that occur annually. It has been estimated that IVBSS technologies have the potential to prevent up to 48% of these crashes.

<u>Description</u>: This program will develop, demonstrate and field test vehicle-based systems to reduce rear-end, lane-change and roadway departure crashes for cars, trucks and transit buses. This will include system design, development of a driver-vehicle interface, development of prototype test vehicles and a field operational test. Systems for both light vehicles (cars) and large trucks will be developed and tested.

Outputs:

- Guidance on the development of the human-machine interface for integrated collision avoidance systems that provide warnings for multiple hazards
- Quantification of the safety benefits and user acceptance of IVBSS systems in a realworld operating environment as used by average drivers
- Determination of the performance capabilities, cost and complexity of multiple-hazard warning technologies

FY 2008 Funding: \$11,000,000

Cooperative Intersection Collision Avoidance System

<u>Objective</u>: To develop and field test intersection safety systems that reduce crashes resulting from traffic control violations and misjudgments in maneuvering through intersections.

<u>Description</u>: This initiative will examine infrastructure and vehicle cooperative systems that help reduce crossing path crashes at intersections. Violations of red lights and stop signs, and misjudgments in traffic gaps during intersection maneuvers are major contributors to deaths and injuries resulting from intersection related crashes. This initiative will build upon the existing research, develop prototype systems, field test those systems, and support and promote national deployment of both infrastructure and vehicle elements.

Outputs:

- Knowledge gained on driver behavior during intersection approaches and maneuvers
- Development of objective test procedures and performance specifications for system developers and deployers
- Determination of the effectiveness of various in-vehicle and infrastructure based warning systems to alert the driver of potential conflicts
- Costs and benefits of potential systems for a national deployment

<u>FY 2008 Funding</u>: \$19,000,000

Next Generation 9-1-1 Initiative

<u>Objective</u>: To enable the transmission of voice, data or video from different types of communication devices to the Public Safety Answering Points (PSAPs) and emergency responder networks.

<u>Description</u>: The Next Generation (NG) 9-1-1 Initiative is creating an open systems design for exchanging and managing E9-1-1 calls from most types of communication devices, demonstrating a working proof of concept showing coordinated performance among the system's

components, and preparing a plan for transitioning from disparate 9-1-1 systems in an Internet Protocol (IP) environment to a national next generation system (or "system of systems")

Outputs:

- High-level design for national NG9-1-1 system completed.
- Technical performance of NG9-1-1 system elements demonstrated
- Stakeholder outreach to promote the implementation of NG9-1-1 architecture
- Migration and implementation plan for NG9-1-1 system completed
- Independent evaluation of system performance, risks, benefits and costs
- Technical basis provided to standards development organizations for IP-based 9-1-1 system elements
- Technical and performance criteria provided to National 9-1-1 Implementation Coordination Office for conducting needs assessment

FY 2008 Funding: \$2,000,000

Integrated Corridor Management

<u>Objective</u>: To improve mobility and safety in major urban corridors through integrated operations.

<u>Description</u>: USDOT will partner with several pioneer sites to develop and analyze strategies for integrated operations on the selected corridors. Use an analysis and modeling methodology and a suite of tools to independently analyze the local ICM strategies and suggest potential for benefits from implementing the strategies. Conduct a filed test of promising strategies in at least one site.

Additionally, USDOT will develop guidance material to support the integration of systems needed to implement ICM strategies. Finally, US DOT will assemble the lessons learned from the development of concepts of operations, requirements development, and analysis and modeling of ICM strategies into a compendium of best practices information on Integrated Corridor Management.

Outputs:

- Surveillance and detection systems requirements document that includes system, functional, and performance requirements
- Surveillance and detection systems application guide
- Feasibility report for the development of a decision support system that aides transportation and transit management operators in choosing ICM strategies to implement, based on current system conditions
- ICM Decision Support System Requirements and Guidance will be developed to support integrated corridor operations
- Design the physical and logical architectures for an ICM decision support system
- Pioneer Site Analysis and Modeling Plans
- Tested ICM modeling strategies
- Analysis and Modeling Tools Assessment Report
- Compendium of ICM Best Practices
- Promotional material for ICM (videos, fact sheets, presentations, brochures, and articles)

<u>FY 2008 Funding</u>: \$12,000,000

Emergency Management and Operations

<u>Objective</u>: To develop tools and processes that support transportation system operators during a wide-range of emergencies.

Description:

The initiative will focus on developing tools, techniques, technical guidance, and standards necessary for state and local agencies and their private sector partners to effectively manage transportation systems during emergencies, especially those requiring evacuations. The EM&O initiative will focus on evacuation management; planning & preparedness, information collection and analysis, and information dissemination & communications

Outputs:

- Model evacuation plans that incorporate dynamic logistical requirements, addresses special needs, and consider multiple modes
- Special needs data enhancement plan to address gaps and weaknesses in databases
- Special needs data integration prototype system for extracting and integrating evacuationrelated data from multiple databases
- Modeling tools that incorporate multiple modes and address special needs and other factors
- Logistical data enhancement plan that address gaps and weaknesses in databases
- Logistical data integration prototype system for extracting and integrating evacuationrelated data from multiple databases

FY 2008 Funding: \$4,300,000

Mobility Services for All Americans (MSAA)

<u>Objective</u>: To increase mobility and accessibility for the transportation disadvantaged and the general public, and achieve more efficient use of federal human service transportation funding resources through technology integration and service coordination.

<u>Description</u>: In collaboration with the Federal interagency United We Ride (UWR) program, the MSAA initiative aims to improve transportation services and simplify access to employment, healthcare, education, and other community activities by means of the advanced technologies of Intelligent Transportation Systems (ITS) and through extending transportation service partnerships with consumers and human service providers at the federal, State, and local levels.

Outputs:

- Knowledge on technological needs, gaps, challenges and solutions related to human service transportation
- Detailed design of ITS-enhanced, scalable and replicable models of human service transportation
- Deployment and evaluation of selected human service transportation models
- Provision of direct technical assistance to human services transportation providers and program planners and implementers

- Development and distribution of technical and/or implementation guides that contain technical details and step-by-step instructions on how to plan, design and implement a successful program
- Development and delivery of targeted training courses
- ITS peer-to-peer support resources on human service transportation
- Provision of various platforms, such as workshops and internet forums, for continuous stakeholders outreach and participation
- Publications and presentations on ITS-enhanced human service transportation

FY 2008 Funding: \$3,000,000

Clarus

<u>Objective</u>: To establish a nationally available network of surface transportation system weather observations and a suite of integrated tools that use the system to enable proactive transportation system operations and management under adverse weather conditions.

<u>Description:</u> *Clarus* consists of two development components. The first component is the development of the *Clarus* System – a processing system for the collection, consolidation, quality control, and exchange of surface transportation weather data and related road and rail conditions. The second component is the development of tailored forecasts, models, and decision support tools that permit more effective use of the *Clarus* System and its processed data by the surface transportation community.

Outputs:

- Formal relationships with NOAA, NSF, AASHTO, and AMS to coordinate program activities with meteorological programs for other transportation modes and consumers of meteorological products.
- Established standards, guidelines, and quality control procedures for surface transportation weather observations and metadata.
- Networks and data management systems integrated with NOAA assets for road weather applications
- Foundation for collecting and integrating vehicle data
- Stimulated private sector community of solution developers that can rely on a stable *Clarus* System to develop business-to-government and business-to-business services

FY 2008 Funding: \$2,000,000

Road Weather Research and Development Program

<u>Objective</u>: to maximize use of available road weather information and technologies; expand road weather research and development efforts to enhance roadway safety, capacity, and efficiency while minimizing environmental impacts; and promote technology transfer of effective road weather scientific and technological advances.

<u>Description</u>: Execute the program objectives as outlined in Section 5308 of SAFETEA-LU. The program will address opportunities to integrate road weather information products into transportation system operations.

Outputs:

- Formal relationships with NOAA, NSF, AASHTO, and AMS to coordinate program activities with meteorological programs for other transportation modes and consumers of meteorological products
- Improved forecasts and models for road surface and atmospheric interface to support public and private weather information providers
- Weather and road surface data integrated into traffic analysis and modeling tools that predict impacts on conditions and operations
- Accurate, route-specific weather information tailored for surface transportation managers.
- Multiple mechanisms to communicate road weather information to transportation managers and the public
- Observing, modeling, and decision support technologies integrated into information infrastructure
- Winter maintenance decision support system functionality incorporated by 20 states

<u>FY 2008 Funding</u>: \$3,000,000

I-95 Corridor Coalition

<u>Objective</u>: To improve mobility for people and goods enhance safety for all travelers, and improve the economic vitality of the I-95 Corridor region through the application of ITS.

<u>Description</u>: The I-95 Corridor Coalition has adopted three specific strategies for achieving this objective.

- 1. Learning and Information Sharing
 - Conduct forums and provide training
 - Foster Networking
- 2. Information Management
 - Provide easier access to information
 - Provide a source of long-distance traveler information
 - Provide information to support future investment decisions
- 3. Facilitate Deployment Across Jurisdictions and Modes
 - Promote multimodal and intermodal coordination
 - Encourage interoperability among jurisdictions
 - Foster adoption of standards

<u>Outputs:</u> Over the next five years, the Coalition will continue to expand its focus on areas of growing regional and national concern such as coordinated transportation system operations, integrating traveler information for trips that cross jurisdictional boundaries, intermodal freight movement security and efficiency, common electronic payment methods, and public safety and security. The Coalition anticipates a more active role in performing analyses of important regional transportation management and operations issues.

FY 2008 Funding: \$7,000,000

ITS Architecture and Standards

Objective:

- To ensure that States, regions, and Metropolitan Planning Organizations (MPOs) have a current, definitive national reference for the development of their regional intelligent transportation system architectures
- To increase transportation efficiency through the integration of transportation systems
- To develop open and non-proprietary ITS Standards that support the wide-scale deployment of interoperable ITS systems.
- To support the use of ITS standards through technical assistance programs, training, and deployment outreach and guidance.

Description:

- Maintain the National ITS Architecture in response to stakeholder input, and requirements from the major USDOT initiatives.
- Provide training, workshops, seminars, process improvement reviews, and technical support including reviews of regional and project architecture efforts at the State and local level.
- Update the Turbo Architecture software tool designed to assist users in their regional and project architecture developments. The tool be maintained and kept current with the latest version of the National ITS Architecture.
- Completion of the initial set of identified ITS standards and maintain the current standards based on user input.

Outputs:

- Version 7.0 of the National ITS Architecture will be published so the Architecture is current, reflecting field input and changes from stakeholders as well as input from the results of completed major initiatives
- The program's 100+ ITS Standards will be maintained and updated as required
- ITS Standards technical assistance, training, guides, lessons learned and standards testing

<u>FY 2008 Funding</u>: \$7,500,000

Professional Capacity Building (PCB)

Objective:

To provide learning and peer assistance opportunities that facilitate the awareness and understanding of ITS technologies, enhance the efficiency and effectiveness of deployments, and foster the development of the ITS workforce

Description:

The PCB Program supports a curriculum of classroom and web-based training courses, the ITS Peer-to-Peer (P2P) Program, and a variety of other learning opportunities. The ITS Solution Center, which is operated by the PCB Program, provides "just-in-time" learning and assistance to agencies and individuals involved in the planning, deployment and operation of ITS.

Outputs:

New course development and course updates; operation and maintenance of the P2P and Talking Technology and Transportation (T3) web programs; operation and maintenance of the ITS

Solution Center and the ITS Professional Development web site; and support of numerous partnerships for enhancing the accessibility of ITS learning.

FY 2008 Funding: \$3,500,000

ITS Program Assessment

<u>Objectives:</u> To develop qualitative and quantitative information on the costs, impacts, and benefits of ITS Systems and to provide knowledge resource products to ITS investment decision-makers and deploying organizations.

Description:

The Program will continue to assess the quantitative and qualitative impacts of deployed ITS applications on the surface transportation environment. The Program will sustain the conduct of independent field evaluations of ITS implementations. The analyses of evaluation results will contribute to the development of a comprehensive body of knowledge resources to support decision-makers and practitioners at all levels of government and the private sector. Evaluation-based benefits, costs, state-of-the-practice, and lessons learned knowledge resources will be tailored to develop a wide-ranging Web and publications based outreach program to support ITS stakeholders. The program will continue to sustain activities in support of TEA-21 earmarks conducting mandated self-evaluations.

Outputs:

- Independent evaluations of ITS deployments
- Assessments of ITS-related issues of interest/concern to USDOT leadership
- ITS knowledge resources comprised of: ITS Applications Overview; benefits information on ITS deployments; documented capital and operations/maintenance-related costs incurred by ITS deployments; state-of-the-practice information; lessons learned information
- A comprehensive Web-based and multimedia-supported dissemination program

FY 2008 Funding: \$7,000,000

ITS Outreach

<u>Objective</u>: To clearly and persuasively convey information about ITS, leading to increasing ITS deployment.

<u>Description</u>: By means of a website, electronic library and participation at national and international conferences, current information about ongoing ITS initiatives and resources for ITS deployment support is broadly disseminated.

Outputs:

- Maintain and improve website of current major ITS initiatives and ITS deployment support resources
- Maintain and improve electronic library of ITS research, technical reports, implementation guides, etc., produced in whole or in part by the U.S. Government

• Disseminate by means of print media and interactive demonstrations information about major ITS initiatives and ITS deployment support resources at national and international transportation and public interest group conferences

<u>FY 2008 Funding</u>: \$1,000,000

ITS Program Support

Objective: To provide technical and program management support to the ITS Program

<u>Description</u>: Through several support contracts, technical support is provided to the Joint Program Office and the modal staff engaged in the delivery of the ITS Program. This support includes analyses and simulation, preparation of white papers, reviews of technical reports, program planning and tracking, and procurement support.

<u>Outputs:</u> Program plans; procurement plans; analyses and papers on such topics as wireless communication traffic simulation, RFID technology, etc.; detailed comments on draft reports

FY 2008 Funding: \$5,500,000

Congestion Relief Research and Development

<u>Objective</u>: To develop, test and evaluate innovative systems and strategies for relieving highway congestion

<u>Description</u>: These funds would support one or more new major ITS initiatives focused on reducing congestion. These major initiatives would be focused on research, development and operational testing necessary to bring innovative solutions to the transportation marketplace. They could include major advances in the acquisition and delivery of real-time information, improved technology for identifying and responding to incidents, effective operational improvements to address traffic flow bottlenecks, and/or enhanced management techniques for controlling and balancing traffic flows along freeways and major arterials.

Outputs: Quantifiable area wide impacts of innovative ITS based solutions on congestion

FY 2008 Funding: [\$25,000,000]

[] indicates non-add

RD&T PROGRAM: UNIVERSITY TRANSPORTATION RESEARCH **AMOUNT REQUESTED FOR FY 2008:** \$69.7 M

Projects

University Transportation Centers Program

<u>Objective</u>: Provide grants to universities to conduct transportation research on critical transportation issues and to support education activities that will expand the workforce of transportation professionals

<u>Description</u>: The University Transportation Centers Programs supports 52 university-based centers that conduct state-of-the-art in transportation research, undertake education activities to for the next generation of transportation professionals, and for technology transfer activities. This program is funded by Title V of SAFETEA-LU and is managed by the Research and Innovative Technology Administration.

This program supports the Department's Organizational Excellence strategic goal.

Outputs:

- Basic and applied research, the products of which are judged by peers or other experts in the field of transportation to advance the body of knowledge in transportation
- An education program relating to transportation that includes multidisciplinary course work and participation in research
- An ongoing program of technology transfer that makes transportation research results available to potential users in a form that can be implemented, utilized, or otherwise applied

<u>FY 2008 Funding</u>: \$69,700,000

EXHIBIT V-3

Federal Highway Administration Support for Secretarial and Administration RD&T Priorities

Policy Initiative	Supporting RD&T Programs	FY 2008 Request (\$000)
E-911—Secretarial Priority	The ITS Public Safety Program is supporting a number of activities to accelerate the implementation of wireless enhanced 911 technology (Wireless E-911). The 9-1-1 system faces serious challenges in locating 911 callers who use wireless telephones.	\$1,000
Highway Incident Management Improvements—Secretarial Priority	Strategic Highway Research Program II: Conducts concentrated, results-oriented applied research focusing on solving the top problems in the area of highway safety, reliability, capacity, and renewal. Research in this area will focus on identifying and developing strategies to mitigate congestion caused by major sources of unreliable travel, such as traffic incidents, work zones, and adverse weather.	\$3,750
Nationwide Differential Global Positioning System (NDGPS)— Secretarial Priority	The FHWA Office of Operations R&D is working with the US Coast Guard, the National Geodetic Survey, the Federal Railroad Administration and other agencies to develop a distribution network for carrier phase GPS solutions from existing NDGPS facilities. Efforts will include development of compression algorithms for distributing ionosphere and troposphere models, analysis of the effectiveness of the models (working with several academic institutions), and refinement of the models to support our developing understanding of the interactions of solar storms with the ionosphere.	\$375 provided by FRA

GPS Modernization—President's Second Term Priority	The FHWA Office of Planning, Environment and Realty supports the national highway planning network, GIS, and spatial data technologies research and technical assistance.	\$350
	The FHWA Office of Operations requests reprogramming of \$3.6 million in unobligated balances of highway funds to provide resources to the Department of Defense for the assessment, development, acquisition, implementation, operation, and sustainment of additional designated Global Positioning System civil capabilities beyond the second and third civil signals already contained in the current Global Positioning System program.	\$3,600 [Non-Add]
Congestion Relief—Secretarial Priority	The FHWA Office of Operations is conducting the Surface Transportation Congestion Relief Solutions Research Initiative to develop information to assist State transportation departments and Metropolitan Planning Organizations to measure and address surface transportation congestion problems.	\$7,842
	The Surface Transportation Congestion Relief Solutions Technical Assistance and Training Program disseminates the results of the surface transportation congestion relief solutions research initiative for the purpose of assisting State transportation departments and local transportation agencies to improve their approaches to surface transportation congestion measurement, analysis, and project programming.	\$720
	The Strategic Highway Research Program II conducts concentrated, results-oriented applied research focusing on solving the top	\$3,750

	problems in the area of highway	
	safety, reliability, capacity, and renewal. Research in this area will focus on identifying and developing strategies to mitigate congestion caused by major sources of unreliable travel, such as traffic incidents, work zones, and adverse weather.	
	The FHWA Office of Operations in cooperation with the ITS JPO is conducting research to develop and evaluate systems and strategies that can be used to improve overall operations in densely traveled urban corridors	\$7,000
	FHWA will expand the ITS R&D Program to conduct one or more new major initiatives specifically focused on research, development and testing of innovative methods for reducing highway congestion.	[\$25,000] Non-add
Impacts of Congestion— Secretarial Priority	The FHWA Office of Planning, Environment and Realty administers the Surface Transportation Environment and Planning Cooperative Research Program, which includes issues related to impacts on congestion.	\$650
Major Corridor Capacity Improvements and Enhancements—Secretarial Priority	Not Applicable	N/A
Committee on the Marine Transportation Systems (MTS)— Secretarial Priority	Not Applicable	N/A
Freight and Port Capacity— Secretarial Priority	The FHWA Office of Operations R&D coordinates and supports the development of standards and prototype equipment for dedicated short-range communications (DSRC) at 5.9 GHz radiofrequency.	\$2,000 - All funds provided by the ITS program
	The FHWA Office of Freight Management and Operations (HOFM) supports five of the six	

initiatives contained in the Secretary's National Freight Action Agenda.	
Initiative 1: Facilitate the development and planning of major freight projects. HOFM provides FHWA's representation on the Departmental multi-modal facilitation team that supports the Port of L.A./L.B. Gateway Project, and provides active staff support to the Chicago Region Environmental & Transportation Efficiency (CREATE) program.	
Initiative 2: Promote intelligent transportation technologies to improve freight transportation. HOFM manages the Universal Electronic Freight Manifest (EFM) ITS initiative and is the FHWA linkage for the Secretary's freight agenda to the Vehicle Infrastructure Integration ITS initiative that is evaluating the enabling technology of 5.9GHz.	
Initiative 4: Enhance the DOT's Freight Professional Capacity Building Program. HOFM's well- established program – the Freight Professional Development (FPD) program – is being used as a model for, and will be woven into, OST's efforts to establish a multi-modal freight professional capacity building program that will span all Departmental modes.	
Initiative 5: Improve the timeliness and quality of freight data. HOFM manages the Freight Analysis Framework (FAF), an integrated database that enables analysis of freight flows across the transportation network, and is involved in the freight data working group, chaired by RITA, to coordinate Departmental activity in	

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	pursuit of improved freight data.	
	<i>Initiative 6: Accelerate development</i> <i>of short sea shipping.</i> HOFM provides substantial data and policy analysis to MARAD in support of the Short Sea Shipping initiative.	
	HOFM is actively engaged in partnering with Department of Homeland Security, on the Electronic Freight Manifest (EFM) ITS initiative. This effort is designed to ensure that the electronic transfer of information relative to freight movement is compatible with and supportive of private sector needs as well as governmental regulatory requirements. HOFM is also partnering with the Transportation Research Board in the scoping, development, and promotion of a national conference to be held September 25-27, 2006 to improve freight modeling activity in the transportation sector. This effort also supports the Secretarial priority of Freight and Port Capacity by enabling better modeling and forecasting freight flows from the data we have.	\$400
	The FHWA Office of Planning, Environment and Realty supports U.S./Mexico working committee research and U.S./Canada transportation border working group research. It also administers the Surface Transportation Environment and Planning Cooperative Research Program, which includes issues related to freight planning.	\$100
Next Generation Air Transportation— <i>Secretarial</i> <i>Priority</i>	Not Applicable	N/A
International Trade Data System— <i>President's Second Term</i> <i>Priority</i>	Not Applicable	N/A

International Transportation Liberalization—Secretarial Priority	The FHWA Office of International Programs conducts related programs, including Scanning, Border Technology Exchange Program, technology and information exchanges (including among experts), participation on international committees and organizations, and training. Activities support the Secretary's highest priority geographic areas, including Asia/Pacific (particularly China and India, US Borders with Canada and Mexico and the Middle East (i.e. Iraq), among others. Activities also support priority substantive areas, especially safety, improving partnerships and opening opportunities for the US transportation industries. As part of the Electronic Freight Manifest, HOFM is participating in the development of an ISO standard for electronic freight messaging while also developing a concept of operations for a web portal that will handle the electronic freight manifest as it passes along each segment of the supply chain and documents the possessor of the freight at each segment.	\$1,250
	FHWA undertakes cooperative efforts with foreign governments to leverage resources and further the goals of the R&T program. This includes participation in international organizations, such as the <u>World Road Association</u> (<u>PIARC</u>) and the Joint Transport Research Centre (JTRC) of the European Council of Ministers of Transport and the Organization for Economic Cooperation and Development(ECMT/OECD).	N/A
	wider international forum devoted to	

	research and related discussions on surface transportation with an intermodal perspective. Support for the JTRC research program includes major work projects in the areas of "Economic Evaluation of Long-Life Pavement" and "Congestion in Large Metropolitan Areas."	
	FHWA staff participate in international symposiums and workshops around the world. One of the anticipated programs includes FORMAT (Fully Optimized Road Maintenance) project steering committee meetings. (The United States is one of 14 countries participating in the European Union sponsored research project.)	N/A N/A
Freight System Impacts— Secretarial Priority	The National Cooperative Freight Research Program is being carried out in cooperation with OST and	\$3,268 K
Project Review Enhancements— Secretarial Priority	RITA. The FHWA Office of Planning, Environment and Realty supports research to improve the environmental review process to achieve the timely delivery of highway and transit projects. In addition, there are many programs under SAFETEA-LU that address process improvements including providing progress reports to Congress.	\$2,100K
Hydrogen Research Initiative— President's Second Term Priority	The Hydrogen-Powered Transportation Research Initiative is being carried out in cooperation with RITA and the University of Montana.	\$650 K
	The Advanced Vehicle Technology Research on vehicle emissions, fuel cells and catalytic processes, and intelligent transportation systems is being carried out in cooperation with RITA and the University of Kansas Transportation Research Institute.	\$2,178 K

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	Hydrogen Storage Research is being carried out at Delaware State University in Dover, Delaware.Research is being conducted at the Rochester Institute of Technology Alternative Fuels and Life-Cycle Engineering.	\$400 K \$800 K
Emergency Preparedness and Disaster Response—Secretarial Priority	The FHWA, together with the National Capital Planning Commission (NCPC), the Department of State, the General Services Administration, the Department of Homeland Security, and others have formed a Perimeter Security Testing Working Group to design and test aesthetically enhanced streetscapes that function as barrier elements for use at federal properties federal properties nationally and abroad. FHWA contributes through the use of models and simulations initially developed for roadside hardware safety analysis. Funding is requested to engineer (including limited crash testing to verify their effectiveness) alternative barrier treatments that meet the Urban Design and Security Plan adopted by the NCPC in October of 2002. The parties have a common interest in ensuring that barrier elements that secure the perimeter of federal buildings are tested for reliability against vehicular attack and are designed to be complementary to the surrounding environment.	\$300 K
	 Proposed FHWA activities in support of national security also include: Develop and Deliver Security Training (TRB/AASHTO Survey found training to be a primary need identified by state DOTs). 	N/A

• Identify and promote best practices and new technology in highway security
• Partner with ASSHTO Special Committee on Transportation Security in delivery of Seminars and Workshops in Highway Security

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EXHIBIT V-4

Federal Highway Administration Implementation of the R&D Investment Criteria

R&D Investment		Actions Reflected in
Criteria	How Applied	FY 2008 Request
Relevance	 Research program is mission oriented and supports the FHWA and DOT strategic goals Stakeholders are engaged throughout the R&T process, including agenda-setting and planning Stakeholders are engaged in agenda-setting and planning through the TRB Research and Technology Coordinating Committee (RTCC), National Partnership Initiative and other advisory groups Stakeholders are engaged in development of multi-year program plans, which are revisited annually External experts and advisory groups ensure program relevance throughout the research process itself Stakeholders are engaged in technology transfer and innovation deployment activities The program employs a number of mechanisms for customer feedback, including surveys and focus groups 	 R&T activities support FHWA and DOT goals, and the Secretary's priorities, including the Congestion Relief Initiative Composition and management of the R&T program, including advanced research, reflect advice of the RTCC Budget request is based on multi-year program plans tied to the strategic goals, which were updated in 2006 with stakeholder input
Quality	 Investment decisions are based on competition and merit review whenever possible External experts are frequently consulted during the design and conduct of research; merit reviews of results are encouraged Influential scientific information is peer reviewed prior to dissemination An assessment process for FHWA's 26 laboratories provides 	 Lab assessments scheduled for FY 2008 include: the Human Centered Systems Lab, Asphalt Labs, Traffic Research Lab and Hydraulics Lab. Influential scientific information is peer reviewed prior to dissemination

R&D Investment		Actions Reflected in
Criteria	How Applied	FY 2008 Request
	independent expert evaluation of research efforts.	
Performance	 Stakeholders are involved in reviewing performance retrospectively Cost-benefit studies have been conducted for elements of the program Efficiency measures (cost and timeliness) link resources consumed and results achieved Program results are linked to the FHWA and DOT performance plans Performance is documented in an annual report 	 Multi-year program plans or roadmaps have been adjusted to reflect past performance and progress towards the goals

Discussion

The Federal Highway Administration (FHWA) conducts research in areas where a unique Federal role has been established, using four criteria that are included in a "Statement of Principles" in the SAFETEA-LU—that is, when:

- the work is of national significance;
- there is a clear public benefit and private sector investment is less than optimal;
- it supports a Federal stewardship role in assuring that state and local governments use national resources efficiently; or
- it presents the best means to support Federal policy goals compared to other policy alternatives.

The FHWA research program includes advanced and fundamental, long-term highway research; research aimed at improving safety and reducing congestion; research aimed at improving the highway infrastructure and reducing lifecycle costs; research aimed at significant highway research gaps and emerging issues with national implications; and research related to policy, planning, and environment. The FHWA also facilitates sharing of research results and promotes technology transfer and innovation.

The FHWA focuses its program on where it can add value or leverage resources by collaborating and coordinating with other programs.

FHWA's Corporate Master Plan for Research and Deployment of Technology and Innovation guides the R&T Program. The Plan outlines a strategy and a Federal role for investing in and conducting research on behalf of FHWA partners and stakeholders. It incorporates three elements considered to be essential by other well-established Federal R&T programs:

- Involving stakeholders throughout the process
- Employing merit reviews
- Evaluating research and deployment on an ongoing basis

Quarterly Research and Development investment criteria reviews at which modal administrations discuss their research and development programs and priorities, are held at the DOT level. At these reviews, modal administrations show how they are supporting the Department's strategic goals, and how they are applying the Office of Management and Budget's research and development investment criteria. The FHWA's program was reviewed in March 2006.

Relevance

In the context of the OMB Criteria for Federal Investment in Research, "relevance" means both relevance to the mission of the agency and relevance to the users of the research.

FHWA's R&T program supports the mission of the agency to enhance mobility through innovation, leadership, and public policy. It contributes to achievement of the Department's and agency's six strategic goals: safety; reduced congestion; global connectivity; environment; national homeland security, and organizational excellence.

The R&T program is stakeholder driven. Stakeholders are engaged throughout the entire R&T process through agenda setting and planning, the conduct of research, technology and innovation deployment, implementation, and customer feedback. Specifically, stakeholders are engaged in agenda setting and planning through the Transportation Research Board's (TRB's) Research & Technology Coordinating Committee (RTCC), the National Partnership Initiative, and other advisory groups. Within the ITS Program, the Department is currently establishing an ITS Advisory Committee to provide formal program input to the ITS Program for a range of stakeholders.

Stakeholders provide input to multi-year program plans, or roadmaps, that support FHWA goals and guide the work of the R&T program. These plans are revisited annually, to determine whether adjustments are needed. FHWA's R&T budget requests are based on the multi-year program plans, which include annual and long-term performance goals, tied to the Administration's and Department's strategic goals.

In addition, external experts and advisory groups ensure program relevance throughout the research process itself. Once research is completed, stakeholders are engaged in a wide variety of technology transfer and innovation deployment activities. Following deployment and implementation, surveys and focus groups are among the activities employed to gain feedback from the users of R&D products.

In response to an Office of Management and Budget (OMB) Performance Assessment Rating Tool (PART) recommendation, FHWA requires the recipients of earmarked funds to demonstrate how projects and intended results support FHWA and DOT goals. To do this, FHWA has developed standardized language that is used in contracts, grants, and cooperative agreements with earmark recipients. This helps to align resources with the goals and hold contractors accountable for progress towards the goals.

Throughout the research process, FHWA is committed to ensuring that national needs and agency goals and priorities are met.

Quality

FHWA employs a number of mechanisms to ensure high quality in its research program.

<u>Awarding Contracts Competitively</u>. To the greatest extent possible, R&T investment decisions are based on the well-established principles of competition and merit review. Most FHWA awards, unless directed otherwise by the Congress in Appropriations or Authorization language, are competitive. Requests for Proposals (RFPs) generally include language describing the relationship between the research project and the agency's long-term strategic goals. Each RFP includes a specific set of criteria, known by all applicants in advance, that their proposal must address to successfully receive an award. Multi-person panels with experience related to the field under consideration, or related applications evaluate the proposals. The firm or applicants that most effectively responds to the solicitation's technical requirements, as evaluated using the criteria provided, then receives a cost evaluation. If the cost evaluation supports it, the firm is then considered for the actual award.

Even in those cases where the recipient is designated it is not unusual for panels of independent experts to help guide the design and conduct of the research and evaluate the quality of the final product, as an alternative process for ensuring quality.

Merit reviews of research results and publications are encouraged for all R&T projects, and all influential scientific information that is disseminated by the FHWA is peer reviewed prior to publication.

Independent groups conduct periodic evaluations of the FHWA's R&T program and help ensure quality. These include:

<u>Research & Technology Coordinating Committee (RTCC)</u>: The Transportation Research Board's RTCC was convened in 1991 and provides periodic independent advice on the overall structure and quality of the FHWA's R&T Program. RTCC membership includes top-level administrators, researchers, and practitioners from state governments, academia, and industry. The RTCC is scheduled to meet twice in FY 2008 and issue a letter report to the Federal Highway Administrator documenting its findings and recommendations. The advice of the RTCC relates to both program structure and quality. The RTCC also takes on the preparation of periodic in-depth "special reports", such as Special Report 261 on the Federal Role in Research and Technology. The future work plan for the committee calls for it to address such issues as the role of universities in a national highway R&T program, improving coordination with other research entities, and FHWA's leadership role in a post-reauthorization R&T program.

Lab Assessments: The FHWA has initiated a lab assessment process for the periodic and routine assessment of laboratory research and programs at the Turner-Fairbank Highway Research Center by independent panels of experts. The process was modeled after the National Academies' review process for the National Institute for Standards and Technology and the Army Research Labs. The objective of the assessments is to provide independent feedback to laboratory managers, FHWA leadership, and partners to improve the quality and performance of laboratory research and services. Three or four lab assessments are conducted each year, and each lab is reviewed once every four years. These independent reviews by external experts help FHWA to monitor whether the research program is appropriately structured and is on track toward providing an appropriate knowledge base for achieving agency goals. The review focuses on enhancing the quality of work performed in the labs (quality) but also addresses whether the work supports the goals of the agency and meets customer needs (relevance) and includes a retrospective review of past performance (performance).

Among the issues related to quality that the lab assessment panels are asked to review are whether:

- Research maximizes quality through the use of clearly stated defensible methods for awarding contracts, and Federal managers and contractors are held accountable for cost, schedule, and performance results.
- Quality assessment of the research is conducted through comparative methods such as best practices identification, expert/peer reviews, and benchmarking.
- In addition to FHWA reports, research is reported in publications that are peer reviewed.
- Methods are in place for maintaining the expertise of research personnel and the capabilities of laboratory facilities.
- Quality guidelines for statistical information are based on structured planning and sound statistical methods.
- Research demonstrates objectivity in presentation and substance, and integrity, (i.e., protecting information from unauthorized access, corruption, or revision).

As a specific example of a quality issue identified and addressed as a result of a lab assessment, the March 2004 assessment of the asphalt labs identified concerns about the treatment of data, noting that "Data are handled very differently in the different labs". Since then we have developed a PC-based "laboratory information management system" (LIMS) that standardizes how data are managed and allows data to be shared across various labs. Also, we developed a written procedures manual specifying standard procedures and methods of recording/storing data, in conjunction with LIMS implementation. Other observations and recommendations of past panels have related to maintaining the expertise of research personnel in light of declining training and travel budgets, retirements and contractor turn-over.

Lab assessments scheduled for FY 2008 include: the Human Centered Systems Lab, the Asphalt Labs, the Traffic Research Lab and the Hydraulics Lab.

The lab assessment is not really complete until the agency considers and addresses the panel's recommendations. Within a month following each review, the lab manager develops a matrix of actions to address the panel's recommendations. Progress is reviewed by FHWA management every six months. This follow-up process allows the lab to implement improvements in a deliberate and measurable way during the four-year period between assessments.

Performance

The FHWA utilizes a variety of mechanisms for customer feedback related to R&T. Outreach efforts such as customer and product surveys, web-based feedback loops, listening sessions, focus groups, lab assessments, and the RTCC are used to gain feedback and information from customer and partner groups. Recent initiatives have included:

- Obtaining Office of Management and Budget clearance for the research and technology customer satisfaction survey.
- Development & implementation of a web based research, development and technology customer survey.

<u>RD&T Annual Performance Report:</u> The FHWA RD&T 2006/2007 Performance Plan and the FY 2005 Research Project Status Summary are published and available on line at <u>www.tfhrc.gov</u>. The Research Project Status Summary documents FHWA's performance retrospectively against outputs previously defined and published in the 2004/2005 Performance Plan. Through the mechanism of these two reports, FHWA's RD&T Program holds itself publicly accountable for its work and the delivery of research products. In addition to outputs, managers track cost and timeliness (efficiency measures). These two measures link resources consumed and results achieved. In addition, these two measures enable FHWA to determine whether the RD&T Program is meeting the annual milestones in the multi-year program plans, and making progress toward long-term goals, and consequently, whether funding should be enhanced or redirected.